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April Autographs.

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I have tried some of your **Concentrated Liquors**, and am highly satisfied with them. *I think every one who values time, and a good article, ought to use them.*

Yours truly
J. T. Bailey

April 24, 1891.

From Mr. JOHN GLEDHILL, Wholesale Druggist,
HALIFAX.

I have used your **Concentrated Liquors** for Tinctures, Infusions, and Syrups, and am extremely pleased with the result. *I shall always use them in future.*

Yours &c
J. Gledhill

April 27, 1891.

From Mr. W. RICKARD, Dispensing Chemist,
FILEY.

In reply to yours of this morning respecting your **Concentrated Liquors**, I am much pleased with them. *They save a lot of time and trouble.*

Yours truly
W. Rickard

April 9, 1891.

From Mr. JAMES WINSHIP, Chemist and Dentist,
BISHOPMILL, YORK.

In reply to yours of the 18th instant, I find your **Concentrated Liquors** perfectly satisfactory and very convenient.

Yours respectfully
James Winship

April 25, 1891.

From Mr. JOHN BROOKS, Dispensing Chemist,
WHITBY.

Your **Concentrated Liquors** for making Tinctures and Syrups have given me every satisfaction.

Yours truly
John Brooks

April 23, 1891.

From Mr. W. J. SANDERSON, Dispensing Chemist,
PEEBLES.

I am very pleased to inform you that I have used your **Concentrated Liquors** for Syrups for years, and have always found them the same. They are very convenient to use, and I believe make a thoroughly reliable preparation.

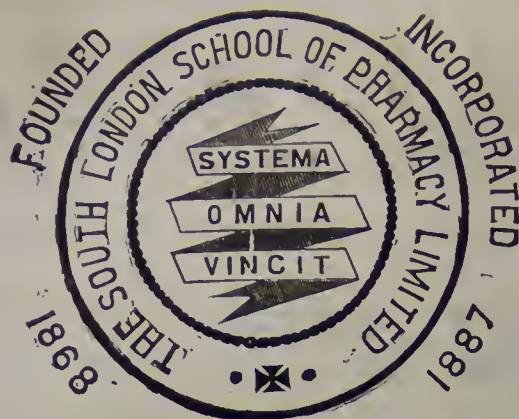
I have not had the **Liquors** for Tinctures and Infusions in use so long, but what I have experienced of them is every way in their favour. To chemists who only require to make small quantities of Tincture, &c., they are a great boon, as they are easily used, and at the same time turn out a finished preparation quite equal to that made by maceration or percolation of the drug, without the loss by evaporation of spirit, which always takes place in the latter methods.

Yours truly
W. J. Sanderson

April 20, 1891.

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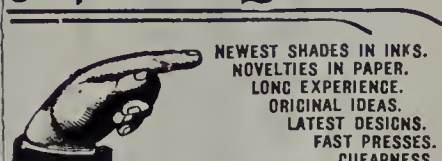


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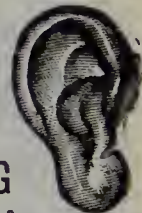
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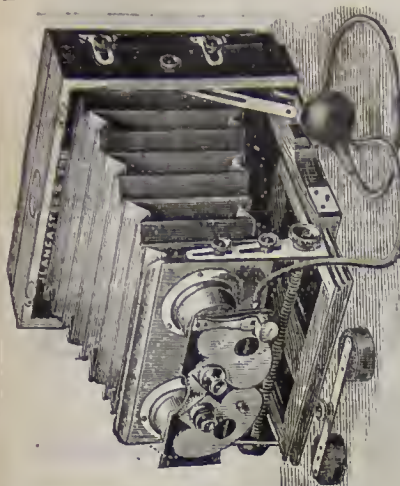
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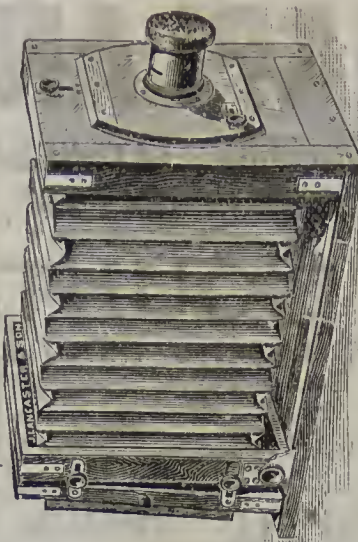


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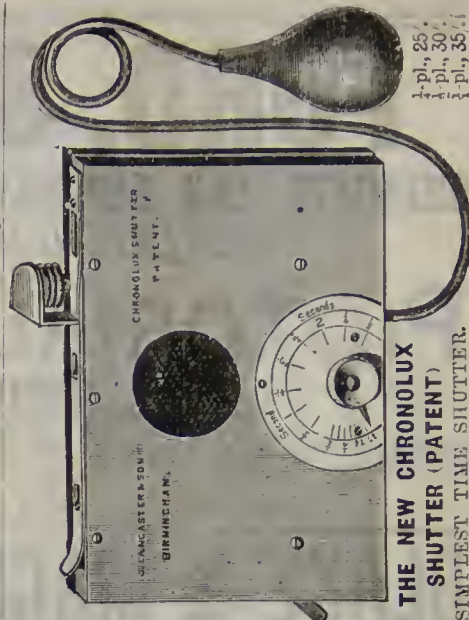
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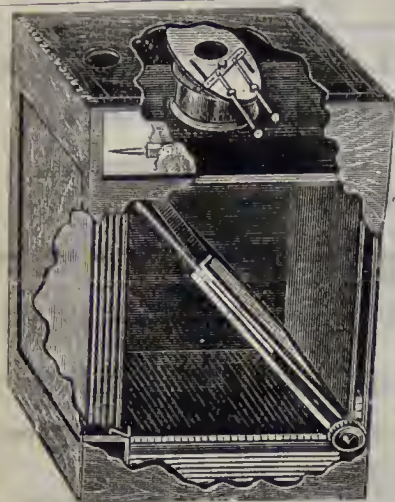
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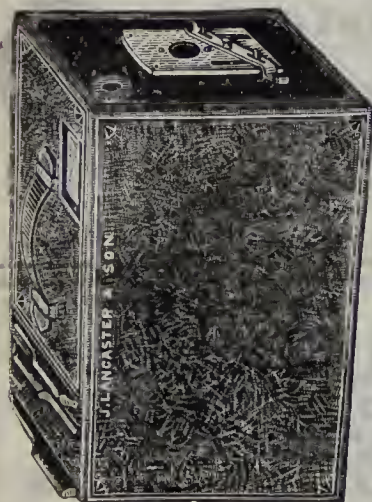


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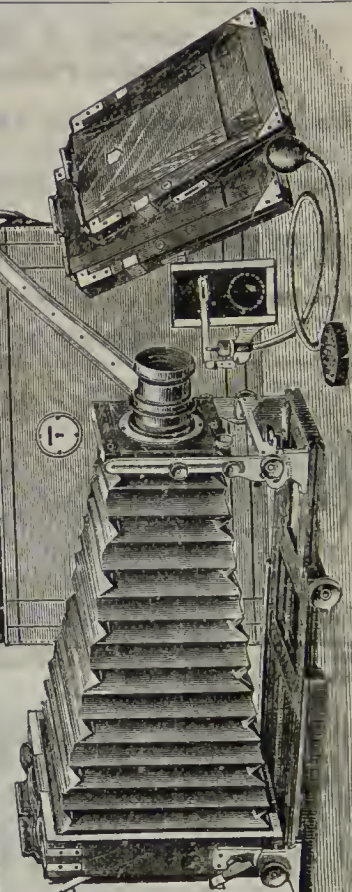
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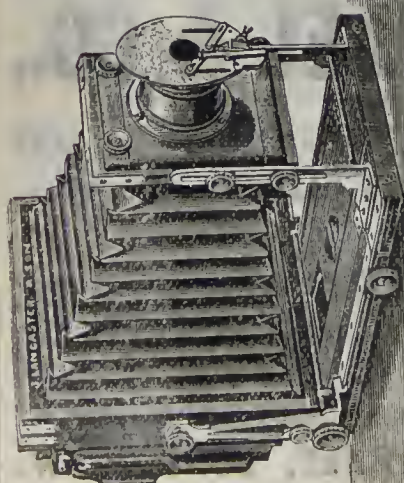
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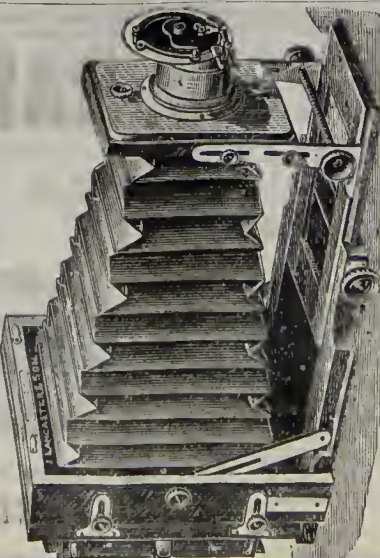
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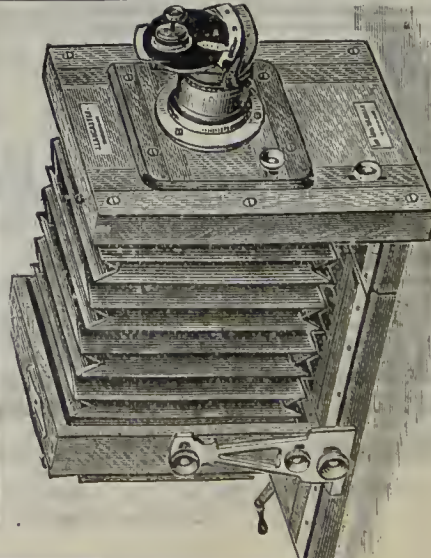
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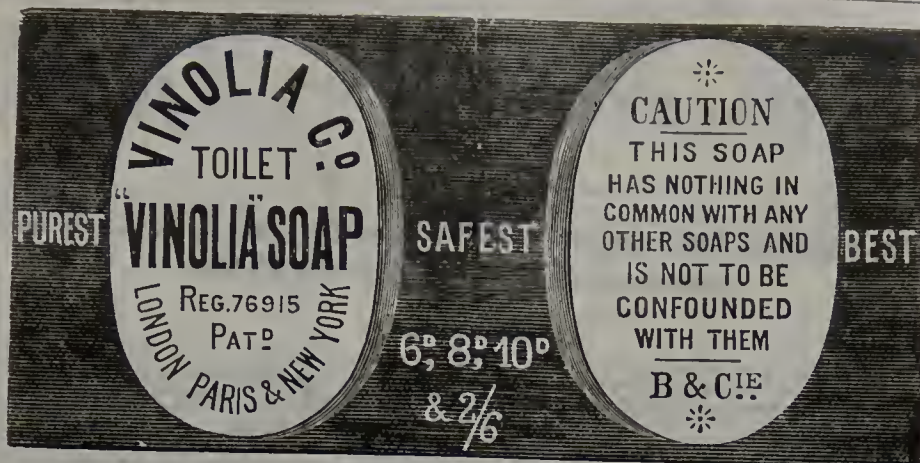


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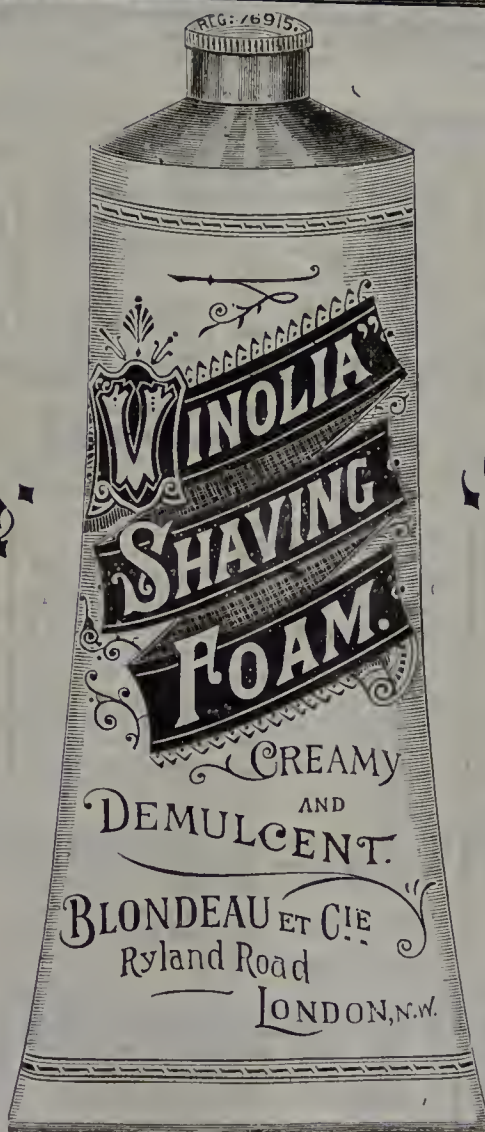


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Telegrams, "TYRER, STRATFORD, LONDON."

Manufacturing Chemists,

STIRLING CHEMICAL WORKS

(ESTABLISHED BY DUNN & CO. 1844),

STRATFORD, LONDON, E.

MANUFACTURERS OF

**PURE, PHARMACEUTICAL,
PHOTOGRAPHIC,
GENERAL & TECHNICAL CHEMICALS.**

Prepared under the direction of THOMAS TYRER, F.I.C., F.C.S., &c.



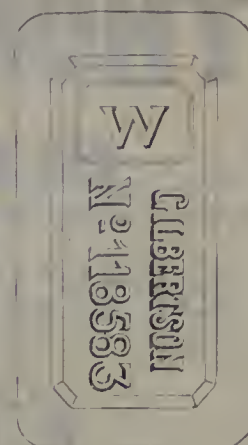
IMPROVED SALINE BOTTLE

No. 118583,

GILBERTSON'S.

PRICES.

4-oz.	6-oz.	8-oz.
16/9	20/-	20/- per gross.



FACSIMILE OF
BOTTOM OF BOTTLE.

Owing to the great success and increasing demand for H. Gilbertson & Sons' Dispensing Bottle, we are introducing the above Improved Saline Bottle, made on the same principle—which shape is now universally liked for superiority of appearance and finish. The fact of its bearing the Trade Mark of the Brand in conjunction with our own name on each bottle is a sufficient guarantee of its uniform excellence. The necks are made as wide as possible, and are fitted with Glass Plug Stoppers and Cork Rings, in three sizes.



GILBERTSON'S DISPENSING BOTTLE.

No. 118583.

PRICES.

1	1½	2	3	4	6	8	10	12	16	20 oz.
10/0	10/0	10/0	11/6	11/6	12/9	12/9	20/6	20/6	23/6	30/0 Green, per grs.
10/9	10/9	11/6	12/6	13/0	15/6	15/6	24/0	24/0	27/0	34/6 White, „

IN CRATES (about 6 Gross Assorted).

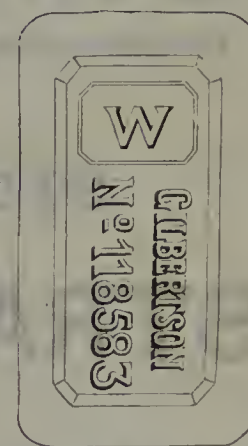
Not less than 1 gross of a size.

1	1½	2	3	4	6	8	10	12	16	20 oz.
9/6	9/6	9/6	10/9	10/9	11/9	11/9	19/0	19/0	21/6	27/0 Green, per grs.
10/3	10/3	11/0	12/0	12/6	14/9	14/9	23/0	23/0	26/0	33/6 White, „

CRATES AND CARRIAGE FREE.

Casks for EXPORT are charged, but delivered F.O.B.

NAME PLATES EXTRA, AT USUAL RATES.



FACSIMILE OF
BOTTOM OF BOTTLE.

This Bottle is made with rounded corners without altering its flat surfaces, which not only adds to its appearance but reduces breakage to a minimum, ensuring accurate capacity, simplifying labelling, and producing a perfect appearance when wrapped. ANY OF THE ABOVE BOTTLES ARE SUPPLIED WITH FLAT, GLOBE, OR CUT GLOBE STOPPERS. ALSO MADE IN ACTINIC GREEN AND AMBER, SUITABLE FOR SPECIALITIES.

SPECIAL QUOTATIONS TO SHIPPERS AND THE WHOLESALE TRADE.

April Issue of Illustrated Quarterly Price List sent on application to

H. GILBERTSON & SONS

(Proprietors—R. D. DIXON, JOHN DOWELL, A. B. V. TAFES),

MANUFACTURERS AND DRUGGISTS' SUNDRIESMEN,

11 ST. ANDREW'S STREET, HOLBORN CIRCUS, LONDON.

Telegraphic Address—"FRANGIPANI LONDON."

LONDON:
45 GIFFORD
STREET, N.
TRADE

"CAMWAL"

TOPS THE TRADE

HARROGATE.
BRISTOL.
MARK.

TELEPHONE
NO.
7547.



**RAISED BY THE
PERSISTENT ENERGY
AND GREAT CARE
OF CHEMISTS**

Year	No. of Members	Dividend
1878	119	None
1879	350	None
1880	430	None
1881	540	None
1882	615	3½
1883	708	5

TELEGRAPHIC

Chemists Starbeck Harrogate



Telegraphic
Address
"RUBINE
LONDON."

**STRENGTHENED AND
SUPPORTED BY THE
APPROBATION OF THE
MEDICAL PROFESSION**

Year	No. of Members	Dividend
1884	908	6
1885	1,193	8
1886	1,463	8
1887	1,612	7½
1888	1,892	5
1889	2,031	7½
1890	2088	8½

ADDRESSES

Camwal Bristol.

This Company manufactures the various descriptions of Mineral Waters of the highest class and of specified formula, and supplies **ONLY** Chemists and Hospitals.

PRICES.

			In Corked Bots.	In Syphons.				In Corked Bot.	In Syphons.
Carbonated Water	..	..	1/-	1/8	Lime Juice	..	..	1/-	2/8
Soda	"	5 Grains to Half-Pint	1/-	1/8	Ginger Ale	..	..	1/-	2/8
Soda	"	B.P. 15	1/-	1/8	Ginger Beer, Glass	..	..	1/-	2/8
Potash	"	5	1/-	1/8	Lithia, B.P. 5 grains to Half-pint	..	..	1/6	—
Potash	"	B.P. 15	1/-	1/8	Iron and Quinine Water	..	..	1/6	—
Seltzer	..	..	1/-	1/8	Mineral Acid	..	..	1/6	—
Lemonade	..	..	1/-	2/8					

Syphons, 24s. per dozen.

Cases—3 dozen 3s. 6d.; 4 dozen 4s. 6d.; 6 dozen 5s. 6d. each.

Empties allowed for at same prices.

3d. per dozen charged extra for the delivery of Syphons in London.

SYRUPS.

In 28-oz. bottles, handsomely labelled and capsuled. Raspberry, Strawberry, Cherry, Red Currant, Black Currant, Pine Apple, &c., 8/- per dozen. Lime Fruit Cordial, 8/- per dozen. Bottles charged 1/- per dozen, and allowed for on return.

A holder (Chemist) of £1 share is entitled to all the advantages of this Association.

SAMPLE CASE OF WATERS SENT FREE.

Handbills with Name and Prices supplied gratis to Shareholders.

The Chemists' Aerated and Mineral Waters Association, Limited,
LONDON, HARROGATE, & BRISTOL.

SYPHONS & SELTZOGENES



**SODAWATER
MACHINERY**
AND APPLIANCES
BRATBY & HINCHLIFFE LTD
ANCOATS 146 MINORIES
MANCHESTER & LONDON EC

81 ROBERTSON STREET, GLASGOW.

All our Seltzogenes are manufactured on the well-known "Fevre" System, and each one is thoroughly tested before leaving our works.

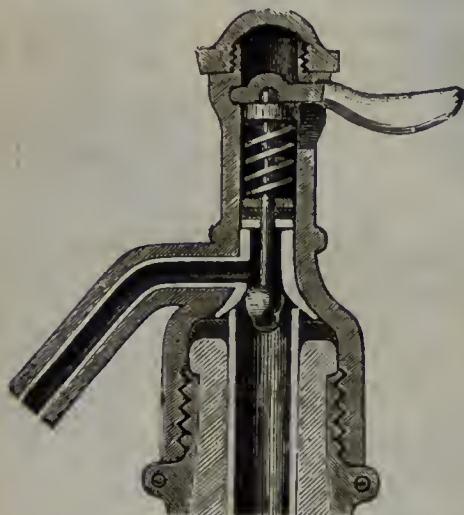


PRICES.

SYPHONS ... 1/6 1/8 and 1/10 each.

SELTZOGENES.

1	2	3	4	5	8 pint.
5/6	6/2	7/	8/	9/11	15/6 each.



Non-Metallic ! Non-Poisonous !! Pure Water !!!

IMPORTANT INVENTION IN SYPHONS.

NEW PATENT GLASS-LINED (THROUGHOUT)

SYPHON HEAD

PATENTED FOR ENGLAND AND ABROAD.

Absolutely ensuring no metallic contamination or poisoning of the drinks.

THIS PATENT GLASS-LINED SYPHON possesses the following advantages over others:—

Perfect purity of Waters.

Glass Lining throughout, so is always quite clean.

Valve working on glass and in a glass tube prevents any drip from tap.

Freer and fuller flow from tap.

Stronger in every part, as exterior of Syphon Head is of metal, and in appearance like ordinary Syphons, and stand wear and tear three times as long.

PRICES ONLY SLIGHTLY HIGHER FOR ALL THESE IMPORTANT IMPROVEMENTS.

Tested before being sent out to bear a pressure of 260 lbs. to the square inch.

Chemists should insist on having Aerated Waters in only Glass-lined Syphons, and so prevent any poisoning by metallic contamination. It is impossible to lay too much stress upon the importance of this matter.

Patent Glass-Lined Syphon Head put to ordinary Syphons for 20s. per dozen.

Sample Syphon sent carriage paid on receipt of 2s. 6d.

Seltzogenes from 7s. 9d. each, 3-pint size.

MANUFACTURERS AND PATENTEES—

THE GLASS LINED SYPHON COMPANY, LIM. (NICOLE'S PATENT),

NETHERTON ROAD, WOODBERRY TOWN, LONDON, N.

SEASON 1891.

JEWSBURY & BROWN'S, MANCHESTER, AERATED
WATERS and BEVERAGES. Specially prepared for a first-
class Family Trade. Chemists who have not hitherto sold these
Waters are solicited to apply for Prices and Terms. Trade Lists,
sample Counter Bills, and Analytical Reports will be sent on
application. JEWSBURY & BROWN Pay Carriage on Waters
and Returned Empties within 100 miles of Manchester.

NATURAL MINERAL WATERS

NET
CARRIAGE
PAID.

INGRAM & ROYLE,

Packing
Free.

SOLE IMPORTERS OF

ÆSCULAP, CARLSBAD, LA-BOURBOULE, VICHY (STATE SPRINGS), &c., &c.

52 Farringdon Street, LONDON, E.C.

19 South John Street, LIVERPOOL.

NAME.	Per Dozen.		Original Packages.				NAME.	Per Dozen.		Original Packages.			
	Bots.	½ Bots.	Bottles.		½ Bottles.			Bots.	½ Bots.	Bottles.		½ Bottles.	
Æsculap	15/	12/	25	30/	50	50/	Missisquoi	25/	..	24	48/	..	..
Apollinaris	6/3	5/	50	25/	100	39/	Orezza	12/	..	30	30/	..	..
Bourboule (La)	11/	..	50	42/	..	..	Pullna	12/	8/	40	36/	40	25/
Carlsbad	12/	..	50	46/	..	..	Reisdorf	6/	..	50	25/	..	..
Condal .. .. .	..	14/	..	..	50	56/	Rosbach	6/	5/	50	24/	100	36/
Contrexeville "Le Cler"	8/	..	50	32/	..	..	Royat	9/	..	50	34/	..	..
Do. "Pavillon"	9/	..	50	35/	..	..	Rubinat	15/	..	25	30/	..	..
Ems	7/	..	50	28/	..	..	St. Galmier Badoit (Still)	6/	..	50	22/	..	..
Flitwick	12/	..	..	..	..	..	Do. Noël (Sparkling)	6/	4/	60	26/	100	34/
Franz-Josef .. .. .	..	11/	..	..	50	42/	Selters	6/	4/6	50	24/	50	17/
Friedrichshall	13/	10/	25	25/	50	40/	Sulis	6/	5/	30	23/	100	36/
Giesshubler, olaret shape	8/	5/	50	30/	100	38/	Taras	12/	..	30	28/	..	..
Homburg	12/	..	50	48/	..	..	Taunus	5/6	4/6	50	22/	100	32/
Hunyadi-Janos	16/	13/	25	30/	50	50/	Vals	8/6	..	50	33/	..	..
Johannis-Brunnen	6/	5/	50	23/	100	36/	Vichy (State Springs)	8/6	7/6	50	33/	50	29/
Kronenquelle	10/	..	50	40/	..	..	Victoria Ofner	14/	10/	25	27/	50	38/
Marienbad	10/	..	50	38/	..	..	Wildungen	10/	..	50	40/	..	..

DETAILED PRICE LIST AND PAMPHLET ON APPLICATION.

[2]

GOLD MEDAL, Amsterdam, 1883. DIPLOMA OF HONOUR, Paris, 1887



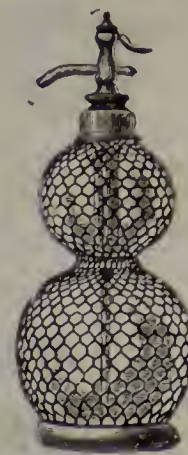
GUERET FRERES,

MACHINISTS, PATENTEEs,
PARIS—72 BOULEVARD DE LA GARE, 72—PARIS.

SYPHONS WITH SHORT LEVER, with Metal Tops of Pure Tin, carefully mounted, and the glass of the *first quality*.

GAZOSELTZ, for the instantaneous production of Aërated Beverages at table. Anyone can use them.

"CONTINUOUS PROCESS" Apparatus complete, guaranteed without flaw in construction, possessing perfect action, and tested to a high pressure, while fulfilling every desirable condition of sanitation and economy.



OUR GENERAL CATALOGUE AND PRICE LIST WILL BE SENT FREE ON APPLICATION.

THE BEST HOUSE IN THE TRADE FOR DRUGGISTS' SUNDRIES, &c.

PRICE LIST POST FREE TO ANY PART OF THE WORLD ON APPLICATION.

TIDMAN & SON, 19 & 21 Wilson Street, LONDON, E.C.

PROPRIETORS OF TIDMAN'S CELEBRATED SEA SALT.

3 lb. Boxes, per dozen, 5/4; 7-lb. Boxes, 10/9; 14-lb. Boxes, 19/9; 28-lb. Boxes, 35/10; Cardboard Packets, each sufficient for a bath, in Boxes of 12 Packets, 12/3 per dozen Boxes; White Linen Bags, each sufficient for a Bath, 3 dozen in a Box, 8/3 per gross.

SPONGES, SURGICAL APPLIANCES, PERFUMERY, COSMETICS, &c., &c.

Discount 5 per cent. for cash with order, or if remitted by 15th of month following that in which goods were supplied.

£5 orders and upwards free to any station in England, or direct port of Scotland or Ireland.

EXPORT ORDERS EXECUTED WITH FIDELITY AND DESPATCH.



WEDGWOOD ACID-PROOF MORTARS AND PESTLES.

ALSO MANUFACTURERS OF
Funnels, Evaporating Pans, Electric Battery Fittings, Bed Pans, Urinals, Medicine Spoons, Physic Cups, Sick Feeders, Bleeding Basins, Medicine Measures, Eye Cups, Inhalers, Nursery Lamps, Wall Tiles, &c.

PRICE LIST ON APPLICATION. SPECIAL QUOTATIONS FOR LARGE ORDERS.
Any Article not bearing the Stamped Trade Mark "WEDGWOOD" is not made by us.

JOSIAH WEDGWOOD & SONS, ETRURIA, STOKE-ON-TRENT,
London Rooms: ST. ANDREW'S BUILDINGS, HOLBORN CIRCUS.



THE "NIAGARA" BOTTLE,

Or Improved CODD'S.

Is the most perfect Bottle in the market.

SEND FOR SAMPLE AND COMPARE!

PRICES ON APPLICATION.

Name on Bottles free for orders of 30 gross.
Under that quantity Moulds charged 10s.
for each size or shape.

Extra Rings, 1s. 6d. per Gross; printed with name of owner, 2d. per Gross extra.



BUY THE "LONDON-MADE" SYPHON

(Title Registered)

AND SUPPORT BRITISH INDUSTRY.

It is the cheapest, strongest, handsomest
and best in the World

Pure Block Tin Tops

PRICE 1/6 EACH.

Nickel-plating Tops from 1½d. each.

Silver-plating Tops from 3½d. each.

Marking on Tops Free.

Marking on Vases Free for orders of 1,000

ILLUSTRATED CATALOGUE FORWARDED FREE UPON APPLICATION TO

BARNETT & FOSTER, "NIAGARA WORKS,"
26T EAGLE WHARF ROAD, LONDON, N.

EIGHT PRIZE MEDALS AWARDED

GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each

GOODALL'S BAKING POWDER.

The Best in the World. 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

GOODALL'S EGG POWDER.

One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

GOODALL'S CUSTARD POWDER.

Delicious Custards without Eggs. In Boxes, 2s., 6d., and 1s. each

GOODALL'S BLANCMANGE POWDER

Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

GOODALL'S QUININE WINE, B.P.

Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

GOODALL'S GINGER-BEER POWDER.

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

GOODALL'S BRUNSWICK BLACK.

For Painting Stoves, Grates, Iron, Tin, &c. 6d. and 1s. Bottles

GOODALL'S LAVENDER WATER.

A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

GOODALL'S PLATE POWDER.

For Polishing and Cleaning all Metals. Boxes, 6d., 1s. and 2s.

GOODALL'S JELLY SQUARES.

Make a Delicious and Nutritious Jelly. In 1/2-pint, 1-pint, and Quart boxes, 3d., 6d., and 1s. each.

PROPRIETORS—GOODALL, BACKHOUSE & CO., LEEDS

**PATENT MEDICINES
AND
DRUGGISTS' SUNDRIES.**
Monthly Price List of Patent Medicines, Druggists' Sundries,
&c., will be sent post free on application to
GOODALL, BACKHOUSE & CO., LEEDS.

RIDGE'S PATENT COOKED FOOD

EXCELS ALL
OTHERSFOR INFANTS AND
INVALIDS.

As professionally certified, it has saved the lives of many, when all other diet had failed. Will support life single-handed, either with or without milk, being a Milk Food.

HAS THE LARGEST SALE IN THE WORLD.

Refuse all imitations—instant on having RIDGE'S FOOD

Pamphlet and Show Cards post-free on application to

Ridge's Royal Food Mills, LONDON, N.

A WONDERFUL SUCCESS!!

NON-INTOXICATING BEER

Made from MASON'S Original

EXTRACT of HERBS

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound.
ENLARGEMENT OF SIZE.

A Sixpenny Bottle makes EIGHT GALLONS of

HERB OR BOTANIC BEER

A NON-INTOXICATING BEVERAGE

Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most perfect substitute for Alcoholic Drinks ever discovered, for either Summer or Winter.

BEWARE of mean and fraudulent imitations.

BEWARE of others copying our title.

MASON'S is the original and only genuine.

MASON'S is a Special Compound entirely from Herbs.

NO OTHER EXTRACT MAKES BEER LIKE IT.

Sold in Bottles at 6d., 1/, & 2/ each, with directions.

MASON'S WINE ESSENCES

Make Temperance Wines in a few minutes.

Ginger, Orange, Lemon, Raspberry, Black Currant, &c.

These are having a very large sale now, and are extensively advertised.

Sold in Bottles at 6d., 1s., and 2s. each.

Quotations on application.

SOLE INVENTORS &
MANUFACTURERS:

NEWBALL & MASON,
Manufacturing Chemists and Botanic Druggists, NOTTINGHAM



DE CARLE'S SOLID FRUIT JUICES.
OR
RIPE FRUIT DRINKS
(REGISTERED N° 72160.)
FROM SOUND, RIPE, SELECTED FRUIT

QUITE A SELLING LINE!

Send **10/6** for 3-dozen Case assorted flavours.
Lemon, Raspberry, Orange, Pineapple,
Cherry, &c.

HANDSOME SHOW CARD, HANDBILLS, ETC., WITH EACH ORDER.

Be first! Order early! and secure your customers for the
Summer demand.

FULL PARTICULARS OF
DE CARLE & SON, MANUFACTURING CHEMISTS, NORWICH.

CONCENTRATED
PEPTONISED COCOA & MILK
AND CONCENTRATED
PEPTONISED MILK
(PATENT).

These two preparations are made with pure rich PRE-DIGESTED Country Milk, and, by mere dilution with hot water, afford a delicious restorative beverage the assimilation of which requires no digestive effort.

SAVORY & MOORE
LONDON.

Tins 1s. 6d. and 2s. 6d. Obtainable Everywhere.

Public Health.

The Journal of the Society of Medical Officers of Health.

LONDON.

VOL. III. No. 6. OCTOBER.

1890.

ON THE DIGESTIBILITY OF FISH AND BEEF ACCORDING TO THE MANNER OF PREPARATION.

By DR. M. POPOFF.

(Zeitschrift f. Physiol. Chemie. XIV. Bd. 6 Heft.)

ABSTRACT OF REPORT.

"Of great importance to dietetics is the quickness of digestion according to the manner of cooking, for celerity is intimately connected with the conception of digestion. It has long been known that all albuminous substances are not digested equally. But a decision as to the method of cooking in which they are digested with more or less facility has been based rather upon theoretical considerations than experimental proof.

"The old experiments of Fr. Tiedeman and Von Gmelin (*Die Verdauung*, 1826), in which they fed animals with different foods, and then immediately, or after a few hours, killed the animals, opened the stomach, and investigated the gastric contents, can only be expected to give misleading facts in answer to our interesting inquiry.

"Frerichs (*Handwörterbuch der Physiologie*, 1846, Bd. III., 1 Abth.) thought that boiled and roast meat were better digested than raw meat, because the gastric juice penetrated easier. Molesworth, in opposition to Frerichs, agreed with the opinion of Schröder and Mulder, and considered raw meat more easily digested than roast, roast than boiled; salt meat, on the other hand, he considered only with difficulty digested. On the other hand, Nowak (*Lehrb. d. Hygiene*, 1883) considered raw meat indigestible.

"These opinions are not convincing, for they do not seem to have been based upon experimental proof.

"Far more consideration must be given to experimental researches on the rapidity of peptonisation of different kinds of meat, carried out under strict and known conditions; yet not very many of these exist. One to be mentioned is Monigs-

berg's research (*Wiener. Med. Blatter*, 1882, S. 582), who submitted meat variously prepared, but otherwise under equal conditions (100 grms. meat, 1,000 c.c. gastric juice, duration of experiment 11 hours), to artificial digestion, and then estimated the peptone formed; the results were as follows:—

Beef, raw ...	...	gave 5.66 grms. peptone.
Beef, boiled ...	"	2.46 " "
Veal, roasted ...	"	3.32 " "
White fish, boiled ...	"	4.38 " "

Hence raw beef gave the best result."

"THE HOSPITAL" SAYS:

"Medical readers fully understand the value of raw meat juice. No argument is needed to convince them of that. What they want full assurance of is that any particular meat juice which they think of ordering is the real thing itself without foreign admixture. The writer of the present article knows Dr. Caffyn, and the whole history and mystery of his meat juice discovery from beginning to end. There is no doubt whatever that Caffyn's *Liquor Carnis* is the real *Simon Pure*.

"Wherever raw meat juice is indicated, Caffyn's *Liquor Carnis* should be tried. So far as we know, it is the only really raw meat juice in the market. Doctors should bear this in mind; and the public also, still more than doctors. The use of the right weapon in the fight, and of the right food or drug in the sick-room, often makes all the difference between cure and death."

Specimens of the Caffyn's *Liquor Carnis* will be sent free by request to the Manufacturers and Patentees, THE LIQUOR CARNIS COMPANY, LIMITED, 50 HOLBORN VIADUCT, LONDON, E.C. Laboratories—SMITHFIELD WORKS, LONDON, E.C.



ROBINSON'S LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt,
and sound Port Wine.

REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skillful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. ROBINSON, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University),
December 15, 1888.

ROBINSON'S ORANGE WINE.

Specially prepared for Quinine Wine, does not deposit, will keep good in any climate, and well adapted for Export Trade. Supplied in Casks containing 9, 18, 30, 60, or 120 Gallons. Terms on application. [2]

PHARMACEUTICAL SHERRY WINE.

This Wine is well adapted for Pharmaceutical Preparations, and is the strength ordered by the B.P. Price, in 6-Gallon Casks, 5/6 per gallon; in 2-Gallon Jars, 6/- per gallon, carriage paid. Casks charged 7/6, Jars 2/6, and allowed if returned. Cash or satisfactory reference to accompany order.

B. ROBINSON. Distiller and Brewer of British Wines. Church St., Pendleton. Manchester

ROWNTREE'S

The "MEDICAL PRESS AND CIRCULAR":—

"Certainly this preparation is of delicate flavour. . . . It is perfectly soluble . . . the small quantity required for the immediate production of a cup of excellent cocoa will ensure for this 'Elect Extract' a favourable reception at the hands of persons of weak digestion, and all who prefer this wholesome beverage to tea and coffee."



The "BRITISH MEDICAL JOURNAL" says:—

"Rowntree's Cocoa Extract is one of the best. Its flavour and aroma are good. Cocoa thus prepared is one of the most digestible articles of food."

YORK, ENGLAND.



PASCALL'S GOLDEN MALTEX

PATENTED.

Contains 25 % of Allen & Hanburys' Extract of Malt.

A NOVEL CONFECTION.

Delicious Flavour. Brilliant & Attractive Appearance.

SELLS AT SIGHT.

Vide Dr. Tanner's Report, and *The Chemist and Druggist*, April 20th.

1/- Bottles, 9/- per dozen; 1-lb. Bottles, 18/- per dozen;
and in 2-lb. and 4-lb. Bottles, 1/4 per lb.

HANDBILLS POST FREE ON APPLICATION.

OF ALL WHOLESALE HOUSES, OR OF THE MANUFACTURER, [1]

JAS. PASCALL, BLACKFRIARS ROAD, LONDON, S.E.

S. G. CLEMENTS & CO.

(Established
1812.)

BRISTOL ANNATTO WORKS.

(Established
1812.)

LIQUID EXTRACT ANNATTO.

A very bright, clear, and strong solution.

ANNATTO IN CAKE.

Giving, when dissolved, a deep Orange Stain with minimum of sediment.

OIL BUTTER-COLOURING.

Unsurpassed in richness of tint, and unobjectionable in taste or odour.

PRIME RENNET

Has each season an increasing sale.

RENNET POWDER (FOR JUNKETS, &c.),

In handsome Tins, 6d., 1/-, 1/6.



PRIME RENNET

Produces the Maximum of Curd.

SPECIAL PRICES TO BUYERS IN BULK.

Grinders of all kinds of Drugs and Spices
for Cattle Powders, &c.

DRUG & SPICE MILLS,

12, 13 & 14 LEWIN'S MEAD, BRISTOL.

TO THE
CHEMISTS & DRUGGISTS
OF
GREAT BRITAIN.

CHEMISTS

TELEGRAPHIC ADDRESS:

COLEMAN,

GEORGE'S, NORWICH.

St. George's, Middle St.

NORWICH,

December, 1887.

The Excise Authorities having created a difficulty as to the sale of Medicated Wine containing a certain percentage of alcohol, we obtained in January last, from the Inland Revenue Authorities, permission to sell our WINCARNIS,* or Liebig's Extract of Meat and Malt Wine, **WITH QUININE**, without a Wine Licence, and many Chemists not holding a Wine Licence have sold considerable quantities. In order further to meet the requirements of the trade, we have introduced a Liebig's Extract of Meat and Malt Wine, **NON-Alcoholic**, made from the juice of the Grape, Liebig's Extract of Meat, and Extract of Malt. This also can be **SOLD WITHOUT A WINE LICENCE**. Your orders will oblige either direct or through the Wholesale Houses.

Yours obediently,

COLEMAN & CO., LIMITED.

*N.B.—The Wine is sold in Bottles, 2/9 and 4/6 each.
Trade prices on application.*

P.S.—Where the Magistrate's Certificate is not held we are willing to pay the entire cost of a Retail Certificate (the holder of which can sell any kind of Wines) if an assorted order of 6 dozen is sent us of any of our preparations. List on application. Our WINCARNIS,* or Liebig's Extract of Meat and Malt Wine **WITHOUT QUININE** commands a very large sale, and is recommended by over two thousand medical men who have sent us testimonials in its favour.

SOLE MANUFACTURERS—

COLEMAN & CO., LIMITED,
ST. GEORGE'S, NORWICH,
AND 3 NEW LONDON STREET, LONDON, E.C.

* WINCARNIS is a NEW NAME, registered to prevent fraudulent imitations.

CAN SAVE

TIME
AND
MONEY

by selling my "Plain Label" Lines, and should remit price quoted for a sample $\frac{1}{4}$ -gross, sent **carriage paid**, on first occasion; and if not satisfactory, I will also pay carriage back and return the cash.

Yours faithfully,

PETER TYRER.

PENNY MENTHOLSOn $\frac{1}{4}$ -gross Cards, at 5/6 and 6/6.**PENNY (TASTELESS) PILLS**6 in a box, $\frac{1}{4}$ -gross Cards, at 4/6.**SPECIAL NEW LINE.****PENNY (TASTELESS) PILLS,
6 PILLS IN GLASS TUBES.**On $\frac{1}{4}$ -gross Cards, at 5/6.**PENNY PERFUMES.****GLASS TUBES.**On $\frac{1}{4}$ -gross Cards, at 6/6.**PENNY TOOTH TINCT.**With Wool complete. On $\frac{1}{4}$ -gross Cards, at 5/6.**PENNY CORN SOLVENT**On $\frac{1}{4}$ -gross Cards, at 5/6.**PENNY COURT PLASTER.**On $\frac{1}{4}$ -gross Cards, at 4/.

For sums under £1 please remit Postal Order,
not Cheque, and oblige,

PETER TYRER,

70 Long Lane, LONDON, S.E.



REGISTERED TRADE MARK.

WHOLESALE TERMS FOR "SONGSTER BRAND" CLEANED BIRD SEEDS.

	PACKETS.	PINTS.	QUARTS.
	1d.	2½d.	5d.
MIXED	9/ gross	22/ gross	42/ gross
CANARY	9/ "	22/ "	42/ "
		2d.	4d.
HEMP	9/ gross	15/ gross	30/ gross

Carriage paid on quantities equal to one gross pints.

ARMITAGE BROS., High St, NOTTINGHAM.

CHAS. SOUTHWELL & CO.

SOLE MAKERS OF THE
EXCELSIOR TABLE JELLIES

In Packets of
half-pint, pint, and
quart, costing
less than one-third
of the ordinary
Bottled Jellies.



BLACK CURRANT
ORANGE
LEMON
CALFSFOOT
VANILLA
NOVEAU
CHERRY
STRAWBERRY
RASPBERRY
PINE APPLE

PRICE LIST ON APPLICATION.

CHAS. SOUTHWELL & CO.
WHOLESALE AND EXPORT CONFECTIONERS,
DOCKHEAD, LONDON, S.E.

LOEFLUND'S MALT AND STERILIZED MILK PRODUCTS



LANCET.—"We have nothing but praise to bestow."

BRITISH MEDICAL JOURNAL.—"Pure Hordeum possesses all the properties claimed for it."

CHEMIST AND DRUGGIST.—"Pure Hordeum may be relied on to contain the highest attainable proportion of diastase."

KINDERMILCH } Infants
ALPINE MILK RUSKS (ground) } foods.
CREAM MILK, unsweetened, sterilized.
CREMOR HORDEATUS, delicious substitute for Cod-liver Oil.
PURE HORDEUM (Malt Extract) also with Cod-liver Oil, Hops, Iron, Lime, Quinine, and Pepsine.
MALT EXTRACT LOZENGES.
MUSTARD LEAVES, best and cheapest.

Sole Agents—ROBERT BAELZ & CO., 14-20 St. Mary Axe, E.C.

BONSON'S DIGESTIVE TEA.

TRADE MARK, STAG'S HEAD.



The Tannin Minimised.

ABSOLUTELY PURE.

EASILY DIGESTED.

SOLD ONLY BY CHEMISTS

Price List on Application.

ADDRESS—

Midland Counties Depot, 29 Carr's Lane, BIRMINGHAM.

TOBACCO AND CIGARS—MIXED PARCELS.

Every Requisite for the Smoker in One Order.

The following Manufacturers' Packet Tobaccos supplied at their List Prices, CARRIAGE PAID:—Wills, Cope, Hignett, Gallaher, Taddy, Ogden, Phillips, Player, Murray, Archer, Clarke, Brankston, Morris, Mitchell, Smith, Lambert & Butler, Pace, Goodwin, Duke, Kinney, Kimball, Richmond Cavendish Company, Carroll, Lorillard, &c. Havana, Mexican, Manilla, Indian, and Swiss Cigars and Cheroots at Importers' Prices.

The Cigarettes of the following Firms at List Prices:—Goodwin, Allen & Ginter, Kinney, Duke, Kimball, Au Bon Fumeur, Wills, Player, Lambert & Butler, Cope, and the leading Egyptian and Turkish Houses.

BRITISH CIGARS from 4s. to 20s. per 100. All carefully selected and well matured. The largest and most varied stock in the United Kingdom to select from.

Irish Roll, Pigtail, Nailrod, Target, Cake, Plug, and all other hard Tobaccos; also Flakes, Shags, Virginias, Cut Cavendish, and every description of plain and fancy Cut Tobaccos of standard quality at lowest prices.

Tobaccoists' Fancy Goods and Smokers' Sundries of every description at current rates.

Carriage paid on parcels from £2 upwards to any station in the United Kingdom. SEND FOR DETAILED PRICE LISTS.

SINGLETON & COLE, Ld. {Tobaccoists' Factors, Tobacco, Snuff and Cigar Manufacturers & Importers
Cannon Street and Fore Street, BIRMINGHAM.

"MYRTLE GROVE" TOBACCO

In 1-oz., 2-oz., and 4-oz. Packets, and ¼, ½, 1 lb. Tins only.



TADDY & CO., 45 Minories, LONDON

ESTABLISHED 150 YEARS.

SNUFF, TOBACCO, AND SEGAR MANUFACTURERS.



Write for List of Specialities.

ESTABLISHED

1743.



TRADE MARK.

ESTABLISHED

1743.

KENNAWAY & COMPANY, WINE AND SPIRIT MERCHANTS, EXETER, LEITH, and LIVERPOOL.

THE Excise regulations now make it necessary for Chemists to hold Wine Licences if they sell anything in the shape of Medicated Wine. Messrs. KENNAWAY & CO. pay half the expense of their Agents' Licences annually, including cost of obtaining them, which they arrange through their own Solicitors. For particulars apply to their Head Office—PALACE GATE, EXETER.

Messrs. KENNAWAY & CO. are Sole Agents for the "Kaiser Fritz" brand of Liebig's Beef Wine. Particulars on application.

BOVRIL

The following is taken from a Clinical Lecture, given at the Hotel Dieu Hospital, by Dr. J. M. BEAUSOLIEL, Professor of Histology at the School of Medicine and Surgery:

"Undoubtedly many persons have been starved to death through inexperienced Medical Men and Nurses placing an undue nutritious value on such preparations as Extract of Meat, home-made beef-tea &c.; whereas,

had BOVRIL been used in their stead, the patients would, in nine cases out of ten, have gained strength to battle against the disease under which they were suffering.

I have no hesitation to advise you to prescribe to your patients, to your convalescents, to those of your clients who have mental exertions, to use JOHNSTON'S BOVRIL, which, in a concentrated form, contains a substantial tonic and a palatable food.

"J. M. BEAUSOLIEL, M.D."

OFFICES:—30 Farringdon Street, LONDON.

MILLAR'S BRITISH WINES.

ORANGE (suitable for Quinine), GINGER, RAISIN, COWSLIP, CHERRY, &c.

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"RAMORNIE."

LIEBIG'S

Extract of Meat.

As supplied to the Admiralty, War, and India Offices.

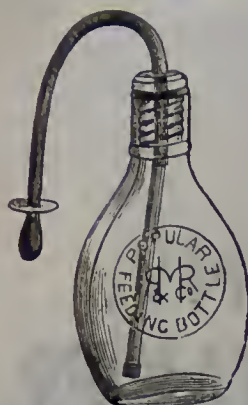
1 lb. Jars..	per lb.	6/9	per doz.	81/0	2-oz. Jars.....	per lb.	7/8	per doz.	11/0
$\frac{1}{2}$ lb. Jars.....	"	7/0	"	42/0	1-oz. Jars.....	"	8/4	"	9/3
$\frac{1}{4}$ lb. Jars.....	"	7/3	"	21/0	$\frac{1}{2}$ oz. Jars.....	"	8/8	"	3/3

QUOTATIONS FOR EXTRACT IN "BULK" ON APPLICATION.

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue, E.C.

6 lbs. Carriage free.

MAY, ROBERTS & CO.'S NURSERY AND NURSING REQUISITES.



POPULAR (6d.)

GREEN, Screw Glass Stoppers.
White fittings, 3/ per dozen,
in box. Each boxed, 3/6
per dozen.
Black fittings, 3/3 per dozen,
in box. Each boxed, 3/9
per dozen.
The same in 1/ quality, 4/9
and 5/3 per dozen.
With Boxwood Tops, 2/4 to
3/1 per dozen.
White Glass Bottles, 2d. per
dozen extra.

FEEDING BOTTLES.

The following are a few of the approved styles regularly stocked, which are saleable and give great satisfaction to customers. They are constructed of the best materials on sound principles, and yield good profit.



SANDRINGHAM. (1s.)

WHITE, Screw Glass Stoppers.

Each in a box.

White fittings, 5/6; Black, 6/ per dozen.



SANDRINGHAM. (1s.)

WHITE, Earthenware Tops.

Each in box.

White fittings, 5/6; Black, 6/ per dozen.



COLONIAL. (6d.)

GREEN, Screw Glass Stoppers.

White fittings, 3/ per dozen,
in box. Each boxed, 3/6
per dozen.

Black fittings, 3/3 per dozen,
in box. Each boxed, 3/9
per dozen.

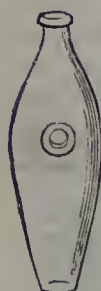
The same in 1/ quality, 4/9
and 5/3 per dozen.

With Boxwood Tops, 2/4 to
3/1 per dozen.

White Glass Bottles, 2d. per
dozen extra.

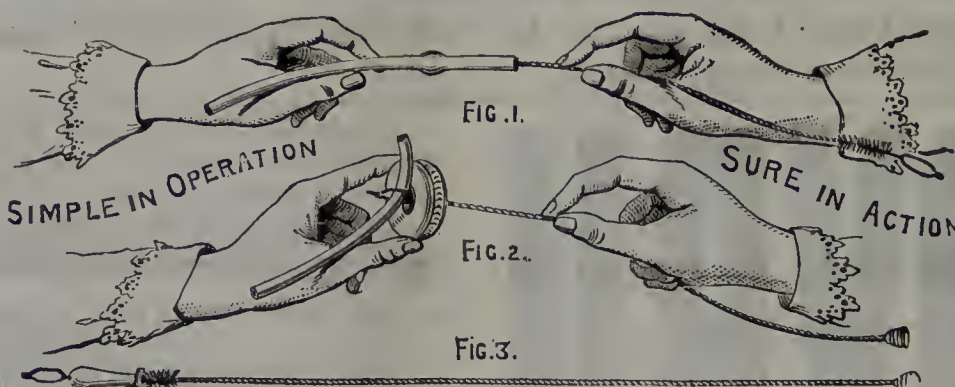
SPLENDID VALUE!

THE OLD-FASHIONED



is again coming into use, many doctors preferring it. We have all the shapes & supply them fitted and unfitted. Thus the kind as

shown in figure, best quality, 3 sizes, assorted, are 3/ per dozen bottles; fitted with black teat and boxwood-top cork, with brush complete, in box, 8/6 per dozen.



PERFECT TUBE CLEANER.

There is nothing to beat this. It is perfect from the sanitary point of view. Use as shown above. Price 8/ per gross.



FIG. 1.



FIG. 2.

BREAST GLASS, as Fig 1, india-rubber and glass mounts, 12/ per dozen.

" " Fig. 2, " " 15/ "

FITTINGS.

INDIA-RUBBER TUBING.

White, Brown, and Black, 3d. to 4d. per yard.

GLASS TUBES.

10d. per gross.

TEATS.



All sizes and shapes. White, Brown, and Black, put up in 1-dozen boxes.

Smallest size, White 5d., seamless 1/; Black 8d., seamless 1/ per dozen.

Other sizes in proportion.

Complete Fittings for all kinds of Bottles. Also Spare Bottles in any quantity from single bottles to original crates.



BREAST EXHAUSTER,
white fittings, 5/9 per dozen;
black fittings, 6/3 per dozen.

MAY, ROBERTS & CO. Wholesale Druggists' Sundriesmen

Dealers in Patent Medicines, Proprietary Articles, Perfumery,
Mineral Waters, Lozenges, &c., &c.

9 CLERKENWELL ROAD, LONDON, E.C.

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HOME & EXPORT.

Nailed to the Mast.

THE LANCET reports in 1881 :—

“It [KEPLER EXTRACT OF MALT] is the best known and, in this country, the largest used Extract of Malt. It is as distinct an advance in therapeutics as was the introduction of cod liver oil. It is one of our best nutritive and digestive agents for chronic dyspepsia, and is undoubtedly useful in consumption and other wasting diseases.”

THE BRITISH MEDICAL JOURNAL reports in 1879 :—

“This Improved Malt Extract has now been under trial for some time, and is very favourably spoken of by physicians both in respect to its nutritive and digestive properties and as being of a very agreeable flavour. . . . It is concentrated *in vacuo*, and being prepared at a very low temperature, its qualities are not deteriorated or its flavour spoiled in the preparation. We can recommend the KEPLER MALT EXTRACT as being of A VERY HIGH QUALITY indeed.”

THE LANCET reports in 1891 :—

“It is some time now since we had occasion to examine the well-known and much-used KEPLER EXTRACT OF MALT. Messrs. Burroughs, Wellcome & Co. evidently keep pace with the newest scientific facts, which every day contribute towards making this kind of preparation perfect. This is shown by the following analysis of a specimen which was recently submitted to us :—

“One part by weight of the Extract was found to completely convert in one hour at 100° F. seven times and a-half its weight of starch into maltose and dextrin; in two hours at the same temperature fifteen times its weight of starch; and in three hours no less than thirty times its weight. Probably at a higher temperature KEPLER EXTRACT OF MALT would be capable of converting a still larger quantity.

“Moisture, 18.41 per cent.; solid matter (diastase, albuminoids, maltose), 80.37 per cent.; mineral matter (for the most part soluble phosphate), 1.22 per cent. The flavour has been further improved, and the delicacy of the colour contributes largely to its attractive appearance.”

THE BRITISH MEDICAL JOURNAL reports in 1891 :—

“The [KEPLER MALT] EXTRACT, which is highly concentrated, possesses a very high diastasic power. . . . It is entirely free from chemical preservatives, the presence of which would, of course, render the diastase inactive; and it may be recommended as A THOROUGHLY SOUND AND RELIABLE PREPARATION.”

The Kepler Extract of Malt and the Kepler Solution supplied to the Trade in bottles containing $\frac{3}{4}$ lb. and $1\frac{1}{2}$ lb. at 20s. and 36s. per doz. Retail, 2s. 6d. and 4s. Supplied by the Wholesale Houses throughout the World.

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.

Above Prices subject to usual Discount.



ESTABLISHED 1859.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

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Supplied regularly to every member of the following Societies, who have adopted *THE CHEMIST AND DRUGGIST* as their official organ.

The Pharmaceutical Association of New Zealand.

The Pharmaceutical Society of Queensland.

The Pharmaceutical Society of South Australia.

The Hobart Chemists' Association.

The Launceston Pharmaceutical Association.

Otago Pharmaceutical Association.

South African Pharmaceutical Association.

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PUBLISHER'S NOTICE.

WHOLESALE HOUSES are requested to bear in mind that the Summer Issue of *THE CHEMIST AND DRUGGIST* will be published on July 25. On that occasion, and not again this year, we shall be prepared to stitch circulars with the journal. This favourite and effective method of distributing a circular to the trade must be arranged in advance, and firms thinking of taking advantage of the opportunity can get full particulars by communicating with us.

THE sale of methylated spirit by retail is to be the subject of restrictions, which the Inland Revenue Department has under consideration.

SUMMARY.

A CONCISE description of the Photographic Exhibition at the Crystal Palace is given on page 614.

THE British Pharmaceutical Conference Committee has agreed to publish a new edition of the Unofficial Formulary.

WE are able to give in this issue particulars of the new Russian tariff, which will come into force in the course of a few weeks.

AN interesting description of the Irish Pharmaceutical Examination, by a successful candidate, is given in this issue.

WE give the results of the April Examinations; also, under New Companies, an instance of the limited method of pharmaceutical registration.

WE have examined the pharmaceutical work of the winter so far as it has come out at Society meetings, and give the results of our investigations in an editorial note.

MR. SCHACHT has drawn attention to a process for estimating nitrogen in potable water suggested by Messrs. Ormandy and Cohen, and advocates its employment, with certain modifications, by chemists.

WE continue the series of articles on "Pharmacy of the World" with an account of the topography, trade, and pharmacy of British Guiana. Particulars of the Chemists and Druggists' Association there are included.

LINSEED MEAL is the subject of an editorial article, the question being raised whether, in view of the Pharmacopœia description, it is an offence under the Sale of Food and Drugs Act to sell as linseed meal the old-fashioned powder of the cake.

THE EXPLOSIVES REPORT published this week shows that eight deaths resulted from accidents in the manufacture of explosives in 1890. Before official inspection was in operation the deaths from the same cause averaged thirty-nine per year.

INFLUENZA seems to be spreading over the country again in a more serious form than when it was epidemic here at the beginning of 1890. In an editorial article we summarise the results of the experience acquired last year, showing the most suitable treatment.

THREE curious attacks on chemists' shops are reported this week. A bicyclist rode through Mr. Jones's plate-glass window at Bournemouth; a cow whisked about in Messrs. T. & W. Harrison's shop at St. Helens; and a horse with a brougham behind him plunged through the window of Messrs. Frazer & Green's shop at Glasgow.

FROM our legal reports this week it will be found that the Court of Appeal has confirmed the decision of the lower court, refusing to give redress to the broker who sold Warner shares and had to pay very high to get them to deliver; in the case of Goodall, Backhouse & Co. v. Wilkinson and Simpson, which also came before the Court of Appeal, a compromise, suggested by the court, was agreed to by both sides; in a prosecution at Birmingham under the Medical Act the magistrates convicted a medical practitioner who, it was proved, had used titles incorrectly implying that he possessed higher qualifications.



CHEMISTS' ASSISTANTS' ASSOCIATION.—The annual general meeting is fixed for Thursday next, May 7.

SOCIETY OF CHEMICAL INDUSTRY.—At the meeting of the London section to be held in the Chemical Society's rooms, Burlington House, on Monday, May 4, Mr. L. Archbutt and Mr. R. M. Deeley will read a paper on "An Improved Process for Softening and Clarifying Water," and Mr. A. H. Allen will complete his observations on "The Chemistry of Whisky and Allied Products."

CHEMICAL SOCIETY.—At the meeting on Thursday, May 7, there will be a ballot for the election of fellows, and the following papers will be read:—"The Action of Alkalies on the Nitro-compounds of the Paraffin Series," by Professor Dunstan and T. S. Dymond; "The Addition of the Elements of Alcohol to the Ethereal Salts of Unsaturated Acids," by Professor Purdie and W. Marshall; "On Some New Addition Compounds of Thiocarbamide affording Evidence of its Constitution," by Professor Emerson Reynolds; and "On the Action of Acetic Anhydride on Substituted Thiocarbamides and an Improved Method of preparing Aromatic Mustard Oils" (author not stated).

MESSRS. BURROUGHS, WELLCOME & CO. AND THEIR EMPLOYEES.—On Friday evening last the employés of Messrs. Burroughs, Wellcome & Co. at Dartford, who have formed amongst themselves a musical and literary society, gave their last entertainment for the season at the Conservative Hall. There was a crowded audience, and the entertainment, which included the popular farce "Ici on Parle Français," was much enjoyed. At the close, and in reply to a vote of thanks to the firm, who had generously paid the expenses of the hall for the entertainments during the winter, Mr. Searl (manager of the laboratories) said Mr. Wellcome was very sorry not to be present owing to his having made a prior engagement; and Mr. Burroughs's absence was accounted for by his being away from England.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor will much oblige.

BIRMINGHAM.

THE LATE EXAMINATION.—Our Birmingham correspondent writes:—At the quarterly slaughter of the innocents held at Bloomsbury Square this month, Birmingham sent up a large contingent. The result was disastrous; but be it recorded that Warwickshire sent up her William Shakespear, and need it be said that he of the very few overcame "Minor" difficulties? Scions of historic houses were referred, and the right-hand men of several well-known suburban pharmacists where much dispensing is done were—*mirabile dictu!*—dubbed unfit to dispense.

EXETER.

The business carried on for some years by Mr. Sanders in Fore Street, was some little time since purchased by Mr. Stocker, who has now transferred it to his Southernhay one.

ASSOCIATION OF CHEMISTS AND DRUGGISTS.—The members of this association held their annual supper at the Royal Clarence Hotel on Tuesday last. The chair was occupied by Mr. J. H. Lake, and the vice-chair by Mr. H. W. Harris. Messrs. T. C. Milton, Tighe, E. Lemmon, Webber, Bartleet, Reed, and P. F. Rowsell (hon. sec) were also present.

LEICESTER.

THE ANNUAL MEETING of the Leicester and Leicestershire Chemists' Association was held on April 22 in the Old Town Hall, the president, Mr. J. G. F. Richardson, in the chair. The treasurer's report showed a balance in hand of 6*l.* 10*s.* 8*d.*; the secretary's report detailed the work of the year. During the summer months of 1890 a practical botany class was held at the Abbey Park Botanical Gardens, under the superintendence of Mr. S. F. Burford. A practical chemistry class was held in the Technical School Laboratory, under the direction of Mr. H. Evans. Classes for the study of botany, elementary chemistry, and materia medica had also been held in the association rooms, superintended by Messrs. G. A. Weall, F. O. Beale, B. Lewitt, and A. E. Eldred. A brilliantly successful ball was held at the County Assembly Rooms, and the association had discussed the Pharmacy Acts Amendment Bill. Various gentlemen were thanked for assistance and gifts. After a speech from the president, the following officers were elected for the current year:—President, Mr. J. G. F. Richardson, F.C.S.; Vice-Presidents, Messrs. E. H. Butler and W. Thirlby; Treasurer, Mr. W. Rowe; Hon. Sec., Mr. S. F. Burford; Committee, Messrs. Beale, Broof, Davy, Evans, and Ward.

LIVERPOOL.

PHARMACEUTICAL STUDENTS' SOCIETY.—A smoking-concert in connection with this society was held at the Falcon Restaurant, Lord Street, on April 23, when about sixty members and friends spent a most enjoyable evening. Mr. Johnson, vice-president, was chairman. During the evening, the chairman, on behalf of the society, presented to Mr. Frank Walker, the retiring secretary, one of Beck's microscopes.

MANCHESTER.

THE INFLUENZA is claiming a large number of victims in this city. Amongst the operators employed by the National Telephone Company, the visitation has proved so serious in effects that the directors have had to issue an appeal for the indulgence of their clients. The "ill wind" has blown a slightly improved trade to the druggists.

THE MANCHESTER LITERARY AND PHILOSOPHICAL SOCIETY, at its annual meeting on April 21, had submitted to it a note on a new method of estimating chlorine in organic compounds, by Mr. A. Taylor and Mr. Geo. Shaw, of the Stockport Technical School. The writers stated that in the course of certain experiments made in the laboratory school, with a view to the simplification of the existing methods of quantitatively determining the halogens in organic compounds, it was found that when such compounds as chloral hydrate were passed in the form of vapour, mixed with hydrogen, through a tube filled with broken quartz or other inert substances, and heated to redness, they were completely decomposed, the whole of the chlorine being given up in the form of hydrochloric acid, the carbon being deposited in the tube. It is proposed to continue the investigations over a wide range of compounds, so as to ascertain if it might not be developed into a process of general applicability for the determination of chlorine, and, possibly, of the other halogens in organic bodies.

PLYMOUTH.

METHYLATED SPIRIT.—The chemists of the Western district have agreed to raise the price of methylated spirit to 6*d.* a pint, being an increase of 1*d.*

PERFUMING THE THEATRE ROYAL.—On the occasion of the visit of "Sweet Lavender" at the Theatre Royal last week Messrs. Breeze & Co. perfumed the building nightly.

SHEFFIELD.

THE INFLUENZA EPIDEMIC.—The report issued by the medical officer of health on Monday clearly shows that the present epidemic is far worse than its predecessor of a year ago. The total number of deaths in Sheffield last week was 375, of which 173 were due to influenza, bron-

chitis, and pneumonia. During the previous week the deaths were 220, of which 87 were due to these diseases. For the week ending April 18 the death-rate was 33.9 per thousand per annum. The death-rate last week works out to the alarming total of 57.5 per thousand. The mortality during last year's epidemic was far below this figure. The highest death-rate during the 1890 outbreak was in the tenth week (week ending March 8), when it reached 33.7. The disease is affecting all classes in the community; even policemen are laid up by the dozen. The doctors are at their wits' end to get through their work. Numbers of chemists and their employes are down; and the shops of Mr. Clark, West Street, and Mr. Graham, Westham, have been closed owing to the illness of principals and staff and the impossibility of getting substitutes. Those pharmacists who are not victims are reaping quite a harvest. The local stores, taking time by the forelock, have chartered a column of the daily papers, and are advertising "anti-febrin, antipyrin, quinine, 1s. packets for 3d.," &c.

IRELAND.

MR. PATRICK KELLY, M.P.S.I., has opened a well-stocked pharmacy and medical hall in South Richmond Street, Dublin.

MEDICINE CONTRACTS.—The Macroom Board of Guardians have accepted the tender of Messrs. Harrington, of Cork, for drugs and medicines.

MR. S. P. BOYD, M.A., chemist and druggist, Mary Street, Dublin, has been appointed manager of the Dublin works of the United Alkali Company (Limited), and agent for the sale of the company's products in Ireland, exclusive of Ulster.

A DISPUTE ABOUT DRUGS.—At a meeting of the Mitchelstown Board of Guardians on April 23 a discussion took place in regard to charges made by Dr. Buckley respecting the supply of medicines to the Union. The guardians were unanimous in asking for a sworn inquiry.

THE DRUG CONTRACT SYSTEM.—At last Thursday's meeting of the guardians of the South Dublin Union, Mr. Byrne called attention to the fact that a large number of medicines and medical appliances supplied for use in the workhouse, a list of which occupied six pages of foolscap, were supplied without any contract, and at fancy prices. He proposed that lists of the articles referred to be prepared and submitted to the chief pharmaceutical and chemical establishments who supply those articles, and that they be invited to tender for them. Surgeon-General Gunn seconded the proposal, which was adopted.

REGISTERED DRUGGISTS.—At the second examination under section 7 of the new Pharmacy Amendment Act, held at the Queen's College, Belfast—Dr. McKinney examining and Mr. Lyons, M.C.P.S.I., Royal Avenue, and Mr. Gibson, M.C.P.S.I., Mill Street, present on behalf of the Pharmaceutical Society—the following were certified to have qualified to sell poisons:—

Allen, James, Old Lodge Road, Belfast
Brady, W. J. H., Portglanone
Cairns, James, Nelson Street, Belfast
Clements, Alfred, Cootehill
Clow, James, Emyvale
Cosgrove, Samuel, Bangor
Edgar, Joseph, Newtownards
Ferri, James, Newtownards
Gamble, Thomas W., Banbridge
Gillespie, James, Banbridge
Gillmer, Campbell, Ballymena
Hill, James, Strabane

Jameson, William, Townhall Street, Belfast
Maxwell, William, Derry
McAdam, Robert W., Omagh
McDonnell, James, Portaferry
McDowell, Thomas, Mountpottinger
Partle, Samuel B., Newtownards
Parrot, Elizabeth, Connswater
Scott, Alfred C., Portrush
Shepherd, Joseph, Derry
Spence, Robert, Castleblayney
Turkington, Robert D., Fintona

PHARMACEUTICAL STATISTICS.—The "Calendar of the Pharmaceutical Society of Ireland," just published, is much enlarged. The Act of 1890 and several appendices are now added, including the examination papers set in 1890. On March 4, 1891, there were 369 pharmaceutical chemists on the register, of whom 127 are members of the Society. There were 74 chemists and druggists registered without examination, and 35 chemists and druggists and registered

druggists registered after examination. Thirty-six of these had been elected as "associate druggists." The Society had 248l. 3s. 1d. invested in "Goschens," but owed the Bank of Ireland, on current account, 6l. 8s. 10d.—that amount, and 10l. balance in hand, with which it began its financial year, representing the excess of expenditure over income in the year (ending September 30, 1890). Its finances are likely, however, to improve considerably this year. Subscriptions will be about doubled, and the Parliamentary expenses, which cost 100l. last year, are not likely to be repeated.

SCOTLAND.

DUNDEE.

ASSISTANTS' ASSOCIATION.—Mr. R. M. Lindsay, late secretary of the association, has been presented with a Gladstone bag by the members of the association, on the occasion of his leaving town. He was also entertained to supper. To manage cricketing affairs the following office-bearers have been elected:—Captain, Mr. George Little; vice-captain, Mr. C. T. Duncan; secretary and treasurer, Mr. William Adams; committee, Messrs. A. Halliburton, J. Davidson, and H. Wilson.

GLASGOW.

A DETERMINED SUICIDE.—A man called Andrew Robertson, who committed suicide in a Glasgow hotel this week, is believed to have swallowed six ounces of chloral hydrate, two ounces of laudanum, and four ounces of alcohol in order to compass his purpose—at least, so the papers say.

CARRIAGE CUSTOMERS.—On Wednesday afternoon, while Buchanan Street was at its busiest, a horse attached to a private brougham became restive on turning from St. Vincent Place to go down Buchanan Street. While rearing and plunging the horse's off hind leg got over the trace, and rendered it more restive than ever. The coachman was unable to control the animal, and when abreast of Messrs. Frazer & Green's warehouse it swerved aside and plunged through the south window. The occupants of the carriage, three ladies, were all severely shaken and alarmed. The coachman was shaken, and the horse was cut about the head and legs. The carriage also sustained some damage. The carriage is the property of Mrs. Rankin, but the horse, driven by her own coachman, was hired from Messrs. Henderson. Messrs. Frazer & Green estimate the damage to show-cases, plates, perfume-bottles, &c., exclusive of the plate-glass window, at over 100l. A large crowd collected, and the ladies were taken into Messrs. Frazer & Green's shop and attended to, and after resting some time were able to go home.

LINSEED MEAL.—At a meeting of the Police Board of the Glasgow Town Council on April 27 Bailie Simons made a statement on what he called "the prosaic subject of linseed-meal," samples of which had been analysed on the instructions of the sanitary inspector. "A good deal of ignorance prevailed," said the bailie, "as to what was linseed meal; and many people got ground linseed cake for pure linseed meal. Ground linseed meal lost all its medicinal qualities when first made into cake and then ground. He thought the public should know this, as well as the shop people, who, through their ignorance, might be brought under the notice of the authorities at any moment." If the bailie or the council's sanitary inspector really knew anything about the subject, they would be aware of the fact that until recently the only kind of linseed meal which the majority of the Glasgow public would have was this very ground linseed cake which they condemn, but which Dr. Abernethy and many eminent medical men maintain to be superior for ointment-making, if mixed with olive oil, to rancid crushed linseed. Within the past two years, probably as a result of its recognition by the B.P. 1885, and the persistent recommendations of doctors and druggists, oily linseed meal has largely superseded the ground cake; but there is still a considerable consumption of the latter.

COMPOUND SYRUP OF HYPOPHOSPHITES.—Glycerine in the proportion of two fluid ounces to the pint greatly increases the therapeutical value of this preparation.—*Am. Jour. Phar*

General News.

ANTI-VACCINATION.—Last week Mr. William Milne, chemist, Fleet Street, Torquay, was summoned for neglecting to have his child, Muriel Mercy Diggell Bennett, vaccinated, and was ordered to have the operation performed within 14 days.

A COW IN A CHEMIST'S SHOP AT ST. HELEN'S.—On Monday evening a cow entered the establishment of Messrs. T. & W. Harrison, the Working-men's Drug Store, in Boundary Road, and did considerable damage to the counter and stock. A boy narrowly escaped injury.

"PUNCH" will have its little joke. This week, in referring to a French piece now running in a London theatre, we are told "Perhaps there is nothing quite excels the subtle touch in the programme where it is written, 'The theatre is disinfected by the Sanitas Company (Limited). *The Wigs by Clarkson.*'"

BRITISH ASSOCIATION.—Mr. Alexander Geikie, F.R.S., Director-General of the Geological Survey, has been nominated for the presidency of the association meeting at Edinburgh in 1892. Mr. Geikie is well known and popular in Edinburgh scientific circles, having been professor of geology at the university there.

THE WINDOW GOT IN HIS WAY.—A bicyclist was traveling on the Old Christchurch Road, Bournemouth, last week, when, in order to avoid a cab which would otherwise have collided with him, he had to turn suddenly to one side, with the result that he went through the large plate-glass window of Mr. Jones, chemist, Firs Glen Terrace. The glass was smashed, but the bicyclist fortunately escaped with a few slight cuts.

CARBOLIC POISONING.—An inquest was held at Clapham on the body of Pierre Dutrulle, aged 2 years, who drank from a bottle containing carbolic acid on April 23, with fatal results. Dr. Quiller, of Clapham, stated that on his arrival he found the boy unconscious, and his lips smelt strongly of carbolic acid. He administered an emetic, but only obtained a few drops. Death was due to poisoning by carbolic acid. A verdict was returned in accordance with the medical evidence.

FATALITY AT A CHEMICAL WORKS.—On April 15, at Llangollen Chemical Works, whilst a man named Joseph Evans, aged 24, was carrying a tin of carbolic acid, he stumbled, and some of the poison was supposed to have got into his mouth. He was picked up, but died before he could be removed to his home. Dr. Roberts was called in, and pronounced life extinct. He has left a wife and two children. At the inquest a verdict was returned in accordance with the facts stated.

NEW AMMONIA PLANT.—The Coltness Iron Company (Limited) have just erected new plant for the recovery of ammonia. The plant is capable of treating the produce of six furnaces. The quantity of gas dealt with is, at 400° Fahr., about 100,000,000 cubic feet, or in a cold dry state 60,000,000 cubic feet, daily. The dust-chamber, which is a dome-shaped vessel of 40 feet in diameter by 65 feet high, devised by Mr. Young, of Peebles, enables the dust to be separated from the gas, so that the latter may pass to the subsequent processes free from dust-particles.

WORKSOP UNION DRUG SUPPLY.—At the fortnightly meeting, held April 23, the clerk to the board reported, with reference to the drug supply, that Dr. Fleming, their medical officer, was willing to fall in with the suggestions of the board. At present the drugs were paid for by the union, and, if the change was made, the cost would come from the county. The cost now was about 80% a year, and, if the changes were made, it would be about one-half that amount. The suggestion was that, instead of the guardians buying drugs, the medical officer should provide them, his salary to be increased. The matter was deferred to enable the clerk to go into the statistics of several years, and lay them before the next meeting of the board.

OPIATES FOR CHILDREN.—An inquiry was held at Rotherham, on April 28, touching the death of Henry

Calaby, aged eight weeks, who was found dead in bed on the previous day. Jane Calaby, the mother, said the child was small and weakly, and on Monday became convulsed. She had recently given the child aniseed cordial to soothe it. She obtained the cordial from a neighbour. Harriet Poulton, wife of John Poulton, forgerman, stated that she gave the mother some cordial, which she made herself. She purchased one pennyworth each of laudanum, essence of aniseed, rhubarb, and magnesia, added half a pound of lump sugar, and boiled the whole in a pint of water. She had given it to her own children, and did not think it dangerous. The coroner advised the witness to give up making medicine with laudanum, otherwise she would be getting into difficulty. Laudanum was not a proper thing to give to young children except on the prescription of a doctor. The jury returned a verdict of "Death from natural causes."

OVERDOSE OF CHLORODYNE.—At Monkwearmouth, on April 27, an inquest was held on the body of Dorcas Campbell (53), of Fulwell Road. Mrs. Campbell had been living apart from her husband. At half-past nine on Saturday evening last one of her sons found her on the bed apparently asleep, and at eleven o'clock the same night she was in the same position. On the following morning he went to her again; she was then on her face, and he was unable to arouse her. He called in his brother and a neighbour, and they went for the doctor, but she died the same morning before his arrival. A bottle which had contained chlorodyne was found under the grate in the room, and Dr. Somerville told the jury that all the appearances of the body indicated that death had resulted from an overdose of that compound. Dr. Somerville saw her on the Friday before her death, and she was then in a very low state, and her heart was weak. The jury found a verdict that death resulted from an overdose of chlorodyne.

METHYLATED SPIRIT DRINKING.—In the House of Commons on Monday Mr. O'Neill asked the Chancellor of the Exchequer whether he was now prepared to state what steps were to be taken to prevent the use of methylated spirit as a beverage. The Chancellor of the Exchequer said, in reply, the Board of Inland Revenue intend to render methylated spirit sold by retail more nauseous in character. They also intend, when there is reason to believe that methylated spirit is being purchased from any retailer for potable purposes, to cause such retailer to keep a stock account, giving the date of sale and quantity sold on each occasion, together with the name and address of the purchaser, and, if any such purchaser be known to be using the methylated spirit as a beverage, the vendor will be warned that proceedings will be taken against him for recovery of the fine of 100% under section 130 of the Spirits Act, 1880, if he continues to sell methylated spirit to the said purchaser. He assured the hon. member that every possible precaution will be taken to put a stop to the practice. (Hear, hear.)

FRIGHTENED OR POISONED.—An inquest was held at Liverpool, on April 24, touching the death of John Gray Anderson, aged 33, who had been a constable in the Liverpool police for the last five years, and previously in the army. Deceased was a single man. He was apparently a strong and healthy man, but on the previous Monday he stayed off duty. On Tuesday he came downstairs, half-dressed, and said excitedly, "I am afraid I am a done man." He took some hot water and salt and vomited, and subsequently sent a servant-girl to a chemist's shop with a bottle of stuff to ask if it was poison. The chemist was unable to say, as there was no label on the bottle. On the servant returning with this answer, deceased rushed out of the house, and two constables, noticing that he was excited, followed him to Dr. Macpherson's house. Dr. Macpherson, district police doctor, said deceased had been under his treatment for erysipelas in his head and face, and he had given him some medicine to taken internally and a lotion to paint the face with. The other bottle produced by the police had not been obtained from him, but he had examined the contents, and was satisfied that it was only an acid, and not poisonous. The lotion for the face was not poisonous either, but, if drunk, would make a person sick. When deceased arrived at his house on Tuesday he was most excited, and seemed staggered. Witness learned that deceased had drunk some of the lotion, and told him not to be alarmed, as it would do him no harm. The man,

however, died in a few minutes. Death was due to syncope, produced, in his opinion, through deceased having been frightened at the idea that he was poisoned, and through his hurrying to witness's house. Dr. Whitford concurred, and a verdict in accordance with the evidence was returned.

THE BORAX COMPANY (LIMITED).—The ordinary general meeting of shareholders in this company was held at Winchester House, Old Broad Street, E.C., on Tuesday last, the Hon. H. A. Lawrence (chairman) presiding. The report showed net profits amounting to 48,976*l*, and, in moving its adoption, the chairman congratulated the shareholders upon the increased dividend that they were able to pay on 1890 of 6 per cent. as compared with 5 per cent. the previous year. The dividend would have been 1½ per cent. more but for certain legal costs which they had incurred. As to the general position of the company, there had been a considerable increase in the sale of raw material, and progress had also been made in the trade of manufactured products, whilst the cost of production had been reduced in both cases. Whether that increase would continue he could not be very sure. He should fancy that there would be a very steady and progressive increase, for it was quite clear that the consumption of borax and boric acid was steadily increasing. Unfortunately, he could not hide from them the fact that he very much feared competition in the future in the sale of raw material, and, if in the raw material, of course in the manufactured products as well. It might be that he was taking too gloomy a view of their prospects, and he should be only too glad to find that he had done so. The trade in Europe was a steadily growing and increasing one. Sir Guyer Hunter, M.P., seconded the motion for the adoption of the report, which, with the dividend at the rate of 6 per cent. for the year, was carried. Mr. Arthur Robottom said that if every one of the producers of borax throughout the world would set about to increase the consumption there need be no fear of competition, as the world was capable of taking five times more than was produced. He thought it a great pity that the article was not better known. He remembered the time when there were not more than 3,000 tons of borax a year used throughout the world. At the present time there were from 22,000 to 25,000 tons a year used. There were twenty-eight different trades dependent upon the use of borax, and that ought to encourage them to take a bright view of their prospects, and not a gloomy one. It might be interesting to them to know that a lecture upon that subject would be delivered at the Society of Arts on May 6. At the time when borax was an article almost unknown to Americans it was selling there at the ridiculous price of 112*l*. a ton; but discoveries were made, and they found any quantity of borax. The whole of the borax that the Americans made now was consumed and used in America, and not one bag or one ounce was brought into this country. They need not fear competition; but what they had to do was to set to work and teach the people how to use the product. The uses for borax were known, but the manner of using it was not. The Hon. H. A. Lawrence and Lieut.-Col. A. W. H. Hornsby-Drake were re-elected directors, and the auditors (Messrs. William Edwards, Jackson, Browning, and Halsey) were also reappointed. A vote of thanks to the chairman ended the proceedings.

Foreign and Colonial News.

THE JUBILEE of the Maryland College of Pharmacy was celebrated on April 17.

THE AMERICAN PHARMACEUTICAL ASSOCIATION met in New Orleans this week.

A BOTANICAL GARDEN FOR SALONICA.—A botanical garden is about to be established at Salonica. The undertaking has been confided to the care of Nadji Effendi, professor at the preparatory Mussulman school of the town. The grounds for the garden have been given to the authorities by the family of Evrinos.

CHROMIC-ACID EXPLOSION.—A serious explosion as the result of careless handling of chromic acid took place at a pharmacy at Hesse in Germany last week. The manager

of the pharmacy, while engaged in dispensing the following prescription:—Sol. acid. chromic, 10 in 200; acid. salicyl. 0.2; spirit, 15—was careless enough to add the alcohol directly to the crystallised chromic acid. An explosion took place owing to the action of the chromic acid upon the alcohol, and the unfortunate pharmacist received injuries which will probably result in his losing the sight of one eye.

CALIFORNIAN OLIVE OIL.—The culture of the olive-tree has been pursued in California for many years. It is now stated that it has at length passed the experimental stage, and has proved beyond doubt that they possess the qualifications for a paying industry. Californian olive oil and pickled olives have been used on the local markets for some time; but one of the great drawbacks to the oil has been the inconstancy of its characteristics, owing to the fact that every small grower produced his own oil. It has now been decided to take up the culture of olive-trees and the manufacture of the oil on a very large scale at Palerma, in Butte, Ca.

DISCOVERY OF ASBESTOS IN NEW SOUTH WALES.—The *Sydney Morning Herald* of March 16 says:—"Mr. C. S. Wilkinson, the Government geologist, has received from Mr. J. R. Edwards, a solicitor at Broken Hill, several samples of asbestos, which were discovered at Red Hill, near Broken Hill. The asbestos was obtained in a vein measuring from 2½ feet to 3 feet in width, at a depth of 10 feet from the surface. Some of it contains fibre 13 inches long, the texture being silky and flexible. The Broken Hill material is not, however, as strong or tough as the Italian asbestos. The colour, too, is different, as the Broken Hill asbestos is reddish in hue, owing to the influence of iron oxide. It is expected that a white mineral will be found at a greater depth. Several tons of asbestos have been brought to grass."

CONSUMPTION OF GERMAN POTASH SALTS IN AMERICA.—The increasing consumption of artificial fertilisers in this country, says the *Oil, Paint, and Drug Reporter*, already attained to enormous proportions, brings into commercial prominence the various chemical substances, natural or compound, that enter into their composition. Among these the products of the great German potash mines rank high, and it is interesting to note how the trade in these commodities is affected by the constantly growing demand for something to stimulate the soil to renewed productivity, particularly from those regions where the specially exhaustive nature of the crops grown, renders imperatively necessary the repeated and continuous application of such stimulating agencies. Among the products of the great German carnallite beds, muriate of potash probably ranks first in importance, as a valuable and indispensable ingredient of chemical fertilisers, although by some kainit is accorded as great if not a greater degree of value for similar purposes. The fact that American manufacturers, at least, give to muriate the preference is shown by the steady increase in the importations of the salt during the past ten years, the total imports into the United States having increased from 14,445 tons in 1881 to 29,780 tons in 1890. This year the consumption promises to exceed that of any former season.

TUBERCULINUM DEPURATUM.—Since it has been proved that tuberculin, manufactured on Dr. Koch's system, is not in all cases free from danger, Continental chemists have been occupied with the question how to prepare a tuberculin which, while closely resembling that of Koch in physical and chemical properties, should yet be absolutely harmless. Professor Hueppe, of Prague, claims to have solved this question, and to have prepared a tuberculin which contains the active principle (whether a ptomaine or protein is not yet determined, although recent researches indicate that the former is produced by the bacillus) in a far more concentrated state than the original liquid. In addition to this, Professor Edmund Klebs, of Zurich, has written a paper to the *Vienna Med. Wochenschrift* (quoted in the *Pharm. Zeitung*), in which he claims to be able to manufacture a purified tuberculin. He starts from the assumption that the conditions of serious illness, such as inflammation, necrosis, and affections of the heart, brain, and stomach, often observed in human beings on the administration of Koch's fluid, have nothing to do with

the curative action of the fluid, but are produced by impurities in the substance, harmless to animals, but poisonous to human beings. He, therefore, purifies Koch's lymph by a very elaborate process, the quintessence of which consists in precipitating it with alcohol, and washing it with chloroform. Further communications are promised at an early date; but in the meantime it is pointed out that these researches will probably result in rendering Koch's lymph a much more useful preparation than it can now be considered.

FORTUNES AND WAGES IN FLOWER-FARMING.—Grasse and its industries still form a leading topic in our illustrated and society journals. The various processes of perfume-making are too well trodden ground already, but a writer in *Galignani's Messenger* contrives to import some particulars of an aspect of the flower industry which has hitherto been overlooked. According to him the Grasse manufacturers are by no means anxious to convert their town into a fashion resort of the character of Nice and other favourite spots of the Riviera. Those who have land are by no means willing to sell, except it be at a price almost prohibitive; they have a conviction that the rearing of flowers for their perfumes is a more profitable business than catering for the wants of visitors. And probably they are right. The experience of speculators in land and villa-construction at Nice or Cannes shows that 3 per cent. is good interest. The twenty millionaires (in francs) of Grasse have not built up their fortunes at that rate. There are half-a-dozen men in Grasse with fortunes of 300,000*l.* to 500,000*l.*, made entirely by the products of fruit and flowers. Little surprise, then, that they are chary in the encouragement of any enterprise which would damage or even compete successfully with this long-established industry. The Grassois workpeople are exceedingly industrious, those engaged upon the flower-farms working ten, twelve, and, in the harvesting periods, sixteen hours per day. The women, who do the lighter work in the perfumeries, earn upon an average 1*s.* per day, the men 2*s.* The mechanics—tinnerns, joiners, copper-workers, and others of the artisan class engaged in making vessels for the manufacturers, or cases and tins for exportation—earn, of course, more, from 2*s.* 6*d.* to 3*s.* and 4*s.* per day. These workers inhabit miserable rooms, of course in flats, situated in dark, dreary, and often foul-smelling streets; an average price paid for two rooms—a kitchen and general living and sleeping room—being about 1*s.* per week. Fifty per cent. of the ordinary employes of the perfumeries are Piedmontese (without them the trade in Grasse could not be carried on), who are willing to do the rough work for much less than the Grassois proper. At the same time, whilst they are content to live under these conditions, they are exceedingly thrifty and economical. The savings bank of Grasse, with a population of 12,000, has for the town and district over 21,000 members. Many of these people manage somehow or other to save 12*l.* to 20*l.* per year, although it must be admitted, of course, that the cost of living is not expensive.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

A FATAL MISTAKE.—Mdlle. Mario Damia, of Bastia, Corsica, was suffering from a violent attack of neuralgia. She took a dose of what she believed to be quinine, but the bottle contained strychnine, and she dropped dead on the spot.

THE HYGIENIC COUNCIL OF THE SEINE DEPARTMENT has named ten of its members as representatives at the International Congress of Hygiene to be held in London next August. They comprise Drs. Lancereaux, Brouatael, Jungfleisch, and other well-known names.

THE MARSEILLES MUNICIPAL COUNCIL has decided to locate its projected new Faculty of Medicine and Pharmacy in the Château du Pharo. Private subscriptions are also being raised in that town for the improvement of the laboratories of the Faculty of Sciences; M. Delibes, the promoter, has already collected nearly 3,000*l.* for this object.

MANUFACTURED WINES.—A Paris wine-merchant and a Nîmes contractor have just been condemned to fines and imprisonment by the tribunals of the latter town for adulteration of wine. The chemical analyst stated that the wine in question was coloured with hollyhocks. In some of it was found impure hydrochloric acid, containing a little arsenic. The court ordered the wine to be confiscated.

CHEMICALS AND BETTING.—A domiciliary visit was made a few days ago by a commissary of police to an establishment on the Boulevard St. Martin, professedly devoted to the sale of chemical products. It appears, however, that this only served as a cloak to a secret betting agency, as papers seized on the premises showed. Betting being now prohibited in France, the stock of chemicals, &c., together with the fittings, were confiscated by the police.

DR. GERMAIN SEE, the venerable professor at the Faculty of Medicine, has lately been much noticed by the Paris press. It is now nearly fifty years since he commenced his career as house surgeon, and besides his clinical studies he is a chemist of no mean order. He is the populariser of many useful medicines now in daily use, such as iodide of potassium, salicylate of soda, antipyrin, lactine, &c., as well as the author of various medical works, and although the oldest, he is far from being the least active, amongst the Paris professors.

ENTERPRISE BADLY CONTROLLED.—M. Jeannotot, the young doctor who recently attracted some attention by his announcement of a discovery of a cure for tuberculosis, has unfortunately allowed his spirit of enterprise to lead him into what may prove to be serious trouble. Desirous of attracting a military clientèle he had on certain occasions assumed the uniform of a surgeon-major, and wore several medals on his breast. When in civil dress he donned the red ribbon of the Legion of Honour. These decorations attracted attention in official circles, and M. Jeannotot was arrested a day or two ago. He acknowledged the fictitious nature of his claims to the uniforms and decorations. The latter offence being very seriously viewed by the French law, the too ambitious doctor was conducted to the police-station.

THE WILL OF AUGUSTE CAHOURS, the well-known chemist, whose death was announced in *THE CHEMIST AND DRUGGIST* of March 21, has recently been made public. The following clause occurs in it: "With a view to encouraging young students who, from a want of adequate means, find it difficult to terminate their course of studies, and in memory of my much-beloved children, who have themselves entered on the path of science at the moment death has separated me from them, I bequeath to the Academy of Sciences, which has honoured me by admission amongst its members, a sum of 4,000*l.* It is my wish that the interest of this sum may be distributed each year, as a means of encouragement, to young men who may have attracted attention by their work, and especially by researches in chemistry, &c." The will further contains precise instructions as to the way the Academy shall select the rising young savants who may be chosen to profit by the legacy.

THE professional bann against advertising must be hard upon some medical men. The red lamp is quite according to etiquette, and now something is wanted to distinguish them in the day time. A "medical hat" is the idea suggested from the ranks. It will need to be soft to agree with the heads of those who wear it. Doctors' doachmen in Berlin are wearing white hats.

EXPRESSIVE—Dr. Allbutt tells us, said Dr. Playfair in a recent address (*Lancet*, April 25), that when anything is wrong with the womb the patient "becomes entangled in the net of the gynaecologist, who finds her uterus, like her nose, a little on one side; or, again, like that organ, running a little, or as flabby as her biceps, so that the unhappy organ is impaled on a stem, or perched upon a prop, or is painted with carbolic acid every week of the year, except during the long vacation, when the gynaecologist is grouse-shooting, or salmon-catching, or leading the fashion in the Upper Engadine."

Pharmaceutical Society of Great Britain.

EXAMINATIONS IN LONDON.

THE Board of Examiners for England and Wales met at Galen Place, W.C., on April 8, 9, 10, 15, 16, 17, 21, 22, 23, and 24. For the

MAJOR EXAMINATION

23 candidates were examined: 9 failed, and the under-mentioned 14 passed, and were declared qualified to be registered as pharmaceutical chemists:—

Charles, David, Llanely
Dalton, Robert, Wilmslow
Dudderidge, Frank Rawlinson,
Blandford
Fielding, Clement, Elland
Halstead, Arthur Walter, Wigton
Lohett, James Godfrey, Hingham
McFall, John Edward Whitley,
Liverpool
Norton, Frank, Cheltenham

Richardson, Hubert Naylor B.,
Leicester
Riddle, Thomas Edward, Hexham
Roper, Henry Arthur, Plymouth
Silversides, Richard Benjamin Gar-
butt, Darlington
Whitehead, Frederick Nathaniel,
Morecambe
Williams, Arthur Harold, Chester

MINOR EXAMINATION.

Two hundred and eighty-eight candidates were examined: 164 failed, and the undermentioned 124 passed, and were declared qualified to be registered as chemists and druggists:—

Agar, Robert Laughton, Bridport
Aitken, John Downie, Southsea
Allen, Herbert Llewellyn, Basing-
stoke
Appleby, Robert Colquhoun, Hull
Ashton, Daniel Aspinall, Mytholm-
royd
Back, Charles Thomas, London
Barrett, William Louis, Ports-
mouth
Baugh, John William Mahanoora,
Boston
Bell, John Reuwick, Newcastle-on-
Tyne
Bell, William, Southampton
Bridgman, William Herbert, Hols-
worthy
Brinson, George Frederick, Frome
Brooke, Edward, Barking
Bugden, Arthur, Bicester
Butterworth, Henry Lindsay,
Oswaldtwistle
Button, Arthur Edward, Lincoln
Callaway, Alfred James, Salisbury
Chambers, John William Parsons,
Derby
Chapman, John, Southwell
Coley, William Henry, Wethersbury
Cook, Harry, Burrow-in-Furness
Cousins, Alexander, Weston-super-
Mare
Cowles, Hector Charles, London
Cupit, Alfred Henry, Lough-
borough
Curtis, John, Newport, Salop
Davies, David, Lampeter
Davies, Evan James, Cardigan
Dickinson, George, Hackney
Dyson, John George Peacock,
Barnsley
Eastland, John, Margate
Eden, William James, Manchester
Ellis David, Ellesmere
Evans, Griffith, Machynlleth
Evans, Griffith William, Aberayron
Field, Ebenezer, Cambridge
Fillingham, John, Grantham
Fowles, Frederick William, Liver-
pool
Freeman, John, London
Fugler, Augustus, Probus
Furnival, William Heber Gunning,
Cardiff

Gard, John, Camelford
Garnett, Henry, Evesham
Gibbs, Arthur, Blackheath
Gibbs, Christopher John, Weymouth
Goy, William Henry, Stamford
Green, William Henry, Gargrave
Griffiths, Arthur Daniel, St. Clears
Harrington, William, St. Bees
Harris, Edwin Thomas Pile, Bristol
Harrison, Edward Frank, Holloway
Harrison, William Arthur, Louth
Hart, John Henry, Strauford
Heath, William, Derby
Hicks, Joseph, Banbury
Hiscox, Walter Reeve, Wisbeach
Hoblyn, Edward Robert, Exeter
Hoile, William Bonny, Sandgate
Hornby, Frederick William, Cot-
tingham
Howell, Treharne, Newport, Mon.
Jeeves, Arthur Thomas, Brighton
Jewell, John Ernest, Liverpool
Jobbins, Edwin, London
Johnson, John Richard, Over
Darwen
Jones, Frederick Pryce, Newtown
Kempton, Ernest Arthur, Ely
Kendall, George William, Rawdon
Kenderdine, Alfred George, Stafford
King, Edwin Harry, Nottingham
Kirkby, John George, Aigarkirk
Latham, Ernest James, Mansfield
Leaper, John Shirley, Spalding
Lee, Ernest Harry, London
Le Seclleur, George, Jersey
Llewellyn, George Parry, St. Clears
Long, Frederick Coleman, Norwich
Martin, William Montagu, Plymouth
Mason, John Henry, Wirksworth
Melhuish, Andrew Ralph, Windsor
Middleton, James, London
Mills, Arthur, Walsall
Minett, Edward Pigott, London
Morris, David Thomas, Pontardulais
Myers, James, Tadeaster
Newman, George Frankliu, Ports-
mouth
Oates, Walter William, Audlem
O'Brien, Albert Christopher, Pem-
broke Dock
Osborn, James Ernest, Middles-
borough
Owen, William, Carmarthen

Padley, Gillies, Boston
Plowright, John, Ryde
Pritchard, Elias Roberts, Aberdaron
Pnekrin, Thomas Edward, Whithy
Rainsdon, Thomas Prince, Ponte-
fract
Retallack, William Cyrus, St.
Austell
Richardson, Wm. Nathl. Saunders,
Warminster
Riches, Frank Fraser, Torquay
Ringer, Frank Arthur, Norwich
Roberts, Fredo. Laneclot, London
Roberts, Walter, Stroud
Rohlsun, Richard Hardy, Wain-
fleet
Sanders, Basil Stanley, Newport,
Mon.
Sant, Ernest, Burslem
Shakespeare, William, Birmingham
Sharman, Herbert Broughton,
London
Shearman, John Samuel, Cambridge
Smith, Edward Charles, London

Smith, Richard Sidney, Dartford
Smith, Stanley John, Colchester
Spyer, Arthur Jesse, Watlington
Sturton, Frederick, Peterborough
Sturton, Samuel Ainsworth, Fram-
ingham
Summers, Stanley, London
Tavener, William Sidney, Sher-
borne
Taylor, Thomas Morley, Bath
Thomas, William John, Beaumaris
Walton, Frederick John, York
Whitlock, William Henry, War-
minster
Williams, Richard Watson, Hanley
Williamson, Frederick Arthur,
Ashton-on-Ribble
Wilson, Arthur, Grimshy.
Wilson, Charles, Louth
Witney, Frederick Harecourt, Devon-
port
Wood, James Arthur, Barnsley
Woodecock, Herbert Hy. Addis,
Margate.

MODIFIED EXAMINATION.

Two candidates were examined: one failed and the undermentioned passed, and was declared qualified to be registered as a chemist and druggist:—

Holme, Henry Thomas, Shurdington

Trade Notes.

COPIES of Dr. Denaeyer's pamphlet on the "Analysis of Peptones" can be obtained from Denaeyer's Peptonoid and Extract of Meat Company (Limited), 118 Bishopsgate Street Within, E.C.

THE annual general meeting of shareholders of the Pharmaceutical Trading Company (formerly A. d'Ailly & Sons and Mastenbroek and Gallenkamp), Amsterdam, took place last week. A dividend of about 8 per cent.—the figure being 46.90 florins—per share, as the result of the trading for the seven months from June 1 to December 31, 1890, was announced, and it was unanimously decided to increase the capital by 100,000 florins.

MESSERS. EASY & Co. are offering to the trade a new polishing-paste, which looks very like our old friend, the rottenstone article. It is black, softish, and used with water; but when one comes to try it, it is seen that the paste is an article of individual merit. It gives without scratching a wonderfully bright lustre to brass, nickel, and silver, which are all that we have tried it upon. It is stated to do the same for other bright metals and glass. The paste is put up in tins.

FLOWER-GROWERS' PRESENTS TO THE QUEEN.—The Queen, during her sojourn at Grasse, has been the recipient of many choice presents on the part of local manufacturers and others. One of the finest offerings, for which Her Majesty expressed her acknowledgments in a flattering letter to the donor, was presented by M. Jean Giraud, a well-known essential-oil distiller. M. Giraud sent to the Queen an assortment of extracts, each contained in a bottle of great richness and exquisite workmanship. The bottles are enclosed in an artistic casket, mounted in antique silver, and bearing in the centre the British coat of arms and a dedication to Her Majesty. Mr. Frederick Boehm, of 27 Billiter Square Buildings, is the agent for J. Giraud & Co. in this country. We are informed that Messrs. Warrick Frères, of Grasse, the English manufacturers of perfumery materials there, also presented specimens of some of their finest products, packed in an incrustated olive-wood casket, to Her Majesty, and that the present was accepted in a very gracious manner.

BRITISH PHARMACEUTICAL CONFERENCE.

A MEETING of the Executive Committee was held at 17 Bloomsbury Square on Thursday, April 23—present: Mr. Martindale (president), in the chair, Professor Green, Mr. Gerrard, Mr. Davies (treasurer), Messrs. Naylor and Ransom (hon. general secretaries), and Mr. Johnson (assistant secretary).

The minutes of the previous meeting were read and confirmed.

The "Blue List" was considered, and some slight alterations were adopted previous to its circulation amongst members for the current year. A few volumes of the "Year Book of Pharmacy" were presented to the Leeds Chemists' Association to complete their set. The last edition of the "Unofficial Formulary" being exhausted, the Formulary Committee was authorised to revise and publish a new edition as early as possible. Mr. Naylor read a letter from Mr. Coleman (local secretary), stating that arrangements for the forthcoming meeting of the conference at Cardiff were progressing satisfactorily. Several gentlemen were proposed and elected to membership.

THE PHOTOGRAPHIC EXHIBITION AT THE CRYSTAL PALACE.

SMALLER by degrees and beautifully less becomes the annual exhibition at the Crystal Palace. Boycotting this show is evidently the ruling spirit of most of the leading manufacturers and dealers, hence the meagre show of only fifteen exhibitors; whether it is a wise policy we cannot decide, but surely somebody suffers for it.

Entering the Palace underneath the orchestra, the first exhibit is WATSON & SON'S, 313 High Holborn—an exhibit very much after last year's style, with a good show of their celebrated "Acme" cameras, of fine finish, and fitted this year with aluminium instead of brass, thus giving a considerable reduction in weight at a very little increase of cost; lenses are also shown with aluminium mounts. Amongst the chief novelties is the "Vanneck" hand camera, a neat little box of $9 \times 5\frac{1}{4} \times 5\frac{3}{4}$ inches, holding twelve quarter-plates and weighing only $3\frac{3}{4}$ lbs. The principal feature, however, is a full-size finder on the top of the camera, the object being focussed on this by means of a milled head at the bottom of the box. The plates are stored at the back of the camera, and are changed by means of the well-known black bag and lever. The whole instrument is perfectly made, and, from the results shown, gives excellent results. Another novelty is the results obtained by, and chemicals for, the diazotype, or primuline, process, to which we have already referred in previous notes.

THE ART COLOUR PHOTOGRAPHIC COMPANY, of Paris and London, have a fine exhibit of coloured photographs—portraits, landscapes, and copies of pictures, the process of producing the same being a secret, and shortly to be patented. We hope to give further information, as we were promised more details.

THE PLATINOTYPE COMPANY, Southampton Row, have an exceedingly neat and artistic display of fine results by both the hot and cold bath processes. We were fortunate enough to see a demonstration of the process of developing some prints. Exquisite little views were given away, and a similar demonstration is to take place every evening.

D. NOAKES & SON, Nelson Street, Greenwich, have one of the most attractive shows in the whole set, judging from the crowd round their stall—the great attraction being metal-workers turning the brass fittings of lenses and lanterns and cabinet-makers fitting up cameras. A very fine show of all lantern accessories is made, inclusive of condensers from $3\frac{1}{2}$ to 12 inches diameter, the chief novelty being an adjustable cut-off jet for lanterns, either single or binnial, and, for photography proper, a new wide-angle camera of very compact and solid construction selling at 7l. 7s for the half-plate size.

TAYLOR, TAYLOR & HOBSON, Slate Street Works,

Leicester, though only a firm of comparatively recent formation, have already gained a name for the excellence of their lenses. They are showing a varied assortment. One of the most useful of all the lenses is the "Casket" series, consisting of three or four single lenses in a neat leather case. These can either be used separately or so combined in one lens-tube as to give several rectilinear combinations of varying foci. This firm have also taken up the agency of the Blair (U.S.A.) cameras, and are showing the "Hawkeye," a neat and efficient hand camera. Taylor, Taylor & Hobson have acquired a good reputation for their lantern-lenses, and, judging from the excellence of the definition on an 80-foot screen, as seen in the lantern-shows given almost nightly at the Palace, they merit all that is said about them.

HANNAM & McILVEEN, Atlas Works, Gainsborough, have a tasteful exhibit of mounts, the effect of which can be actually judged, as prints are mounted on them.

PARKER & Co, 288 High Holborn, devote nearly the whole of their stand to their new hand camera, "The Companion," which is a magazine camera, the plates being placed in sheaths at the back, brought up to focus by a screw, and then dropped into the bottom of the camera by a lever. A Taylor lens, and a shutter composed of two metal discs, with apertures passing from opposite directions across the lens, complete the apparatus, with the usual finders. They are also showing tourist cameras, tripods, and complete sets, and promise a new hand camera decidedly novel in idea.

S. T. MATTHEWS & Co., 8A John Bright Street, Birmingham, have a brave show of novelties in hand cameras, the "Itakit," "Sovereign," and "Kinematic." The "Itakit" is a compact little metal camera with magazine for 12 or 24 lantern-size plates, and is fitted with a rapid achromatic fixed focus lens, and whilst a plate is being exposed the magazine is fitted on the top of the camera, but for convenience in carrying it can be placed inside the camera. The "Sovereign" is of rather superior make, and has a finder and a full size focussing-screen. This firm are also showing a useful and handy knapsack for cyclists, the "Takeabout," which is well worth the attention of any of our cycling subscribers.

FRANK WEEKS, 14 Thorpe Road, Forest Gate, E., shows some drawings specially prepared for reproduction by photography, in the form of lantern-slides, &c.

JUSTIN BROS., 116 Beckenham Road, Penge, S.E., show a pocket walking-stick and camera stand, each leg being a ribbon of steel spirally wound, and closing up into a little thimble-like hood.

W. F. SLATER, 169 Southampton Street, Camberwell, shows a very tasty assortment of mounts and frames, and some very well-made cameras and general apparatus, such as lenses, printing-frames, dishes, &c. One part of this exhibit which struck us as being at once practical and likely to take well was a new dark room lamp, which throws no shadow, gives ruby or orange light at will, and is by no means dear.

I. DESIRÉ ENGLAND, 21 Charles Street, Royal Crescent, W., has some excellent large specimens of negatives on his celluloid film, and a very simple, but efficient, film-carrier, of cardboard and ferrotype metal. Some very fine lantern-slides on England's plates, photo-mechanical plates, and some opals complete the show.

A. PALMER, 36 Briar Street, Nottingham, shows the model of a new plate and print washer of oblong shape, adjustable for different-sized negatives, and the water is supplied and emptied from the bottom.

ARUNDEL & MARSHALL, Penn Street Works, Hoxton, N., have a small display of extremely neat boxes of various kinds, for negatives, plates, and liquids.

HOUGHTON & SON, 89 High Holborn, occupy a whole block, the centre being one of their portable dark rooms, and around a good show of their various specialities. They are also showing the "Automatic" hand camera, seen by "Our Town Traveller," and noticed in THE CHEMIST AND DRUGGIST of last week. The "Cylindograph" camera, for which they are agents, is also to be seen. The chief novelty, however, and one that struck us as being exceedingly useful, is a ladder-stand, by means of which one could obtain a position above a crowd, or for interior work. The stand folds up into fairly small bulk, and can be easily carried.

Marriages.

BOYD—BERKELEY.—April 22, at St. Mary's Church, Ware, Herts, by the Rev. Thos Crick, M.A., uncle of the bride, assisted by the Rev. E. Kirkley, M.A., Vicar, Alexander James Boyd, B.A., M.D., T.C.D., Manor House, Ware, third son of Samuel Boyd, Esq., J.P. (of the firm of Boileau & Boyd), Killiney, co. Dublin, to Constance Mary, elder daughter of B. C. Berkeley, Esq., Collette Hall, Ware.

CARTER—DOBELL.—At the Cathedral, Truro, by the Rev. Canon Donaldson, Ben. Carter, pharmaceutical chemist, Truro, only surviving son of Richard Carter, Royal Hotel, Falmouth, to Grace Pearse, third surviving daughter of Robert Dobell, Royal Hotel, Truro.

MUNRO—CAMPBELL.—At the Roxburghe Hotel, Edinburgh, on April 24, by the Rev. John Morgan, Viewforth Free Church, Donald George Munro, chemist and druggist, Tain, to Neenie Ross, third daughter of the late William Campbell, Tain.

WARNER—ROACH.—On April 28, at Charfield, Gloucestershire, by the Rev. J. Hardyman, George Oram Warner, chemist, Clifton, to Annie, third daughter of the late John Roach, Esq., of Charfield.

Deaths.

GAUNT.—On April 18, Mr Rann Dolphin Hicks Gaunt, chemist and druggist, Union Street, Southwark. Aged 69.

HEY.—On April 13, Mr. Thomas Knowles Hey, chemist and druggist, Hebden Bridge, Yorkshire. Aged 78.

IBBOTSON.—On April 22, at Ash Villa, Ecclesall Road, Mr. Joseph Ibbotson, late chemist and druggist, born at Hathersage, Derbyshire, October 26, 1835.

MEADOWS.—On April 17, Mr. John Slater Meadows, chemist and druggist, Wantage, Berks. Aged 65.

RANKEN.—On April 26, at 17 East High Street, Forfar, Mr. John Ranken, chemist and druggist. Aged 44.

ROBBINS.—On March 29, Mr. Sharman Robbins, Norfolk Street East, Wisbeach. Aged 77.

SECCOMBE.—Mr. Maurice Seccombe, a student at the South London School of Pharmacy, died at his lodgings in Trinity Square on Saturday last from pneumonia. He was to have presented himself for the Minor examination on the day previous to his death. Mr. Seccombe, who came from Tavistock and had served his apprenticeship with Mr. Pearce, chemist, of that town, was a brother to the present secretary of the London Chemists' Assistants' Association.

SHAKESPEARE.—On April 25, aged 37, Prudence Shakespeare, secretary and dispenser to the Balsall Heath branch of the Birmingham Provident Dispensary, wife of John Thomas Shakespeare, Sherbourne Road. The deceased lady whose death is announced had many lady pupils who after finishing their pupilage passed the assistant's examination of the Apothecaries' Hall, and are now scattered about the town and district with surgeons and at public institutions as dispensers and clerks.

WHITWELL.—On April 19, Mr. John Whitwell, chemist and druggist, Peterborough. Aged 84.

Personalities.

MR JNO. HUNTER, chemist, Penrith, has opened a neat pharmacy at 17 and 19 Bank Street, Carlisle.

MR. PETER AUCHINACHIE, Ph C., has commenced practice as an analytical and consulting chemist at 10 Newman Street, Oxford Street, W.

MR. JAMES HAZLETT, formerly drug-buyer to Messrs. McKesson & Robbins, has joined the firm of Mr. George A. Wasson, of New York, who carry on a general brokerage and commission business.

MR. JAMES HADFIELD, chemist and druggist, was re-elected chairman of the Rochdale Board of Guardians at their meeting on April 23. A warm tribute was paid to Mr. Hadfield for his work during the past year.

On Saturday last Mr. Altoft, assistant with Mr. Jeeves, chemist, 88 St. George's Road, Brighton, pluckily swam to help a boy, who had fallen from a high breakwater and was being carried out to sea. He succeeded in rescuing him.

MR. GEORGE WESTON, A.P.S., late with Glaisyer & Kemp Brighton, and nephew of Mr. G. Weston, chemist, Sleaford, Lincolnshire, has succeeded to the business so long carried on by Messrs. Greenwood at 20 Parliament Street, Harrogate, where he was formerly assistant.

MR. G. B. CLARKE, chemist, Woburn, Beds, has been elected town churchwarden for the nineteenth time. Mr. Clarke has had five successive Dukes of Bedford as neighbours during the time he has lived at Woburn—viz., John, Francis, William, Hastings, and Francis.

DR. EDINGTON, the bacteriologist selected by Sir Charles Mills, agent general for the Cape of Good Hope, will proceed to Cape Town in the Union Steamship Company's royal mail steamer *Moor*, sailing from Southampton on May 15, in connection with the subject of the phylloxera in the wine districts.

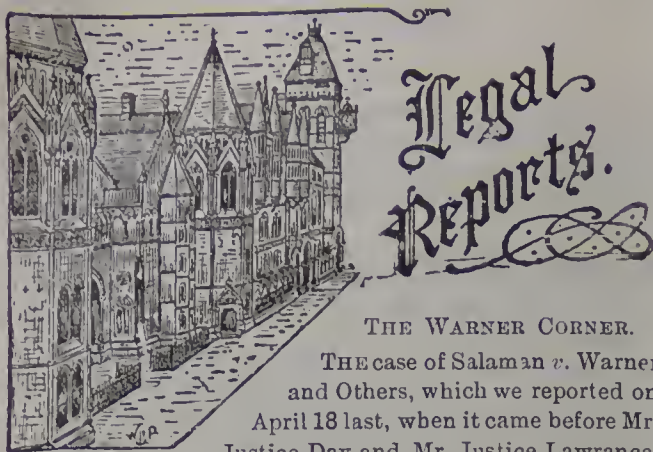
MR. G. HAROLD KENT, of the firm of G. B. Kent & Sons, brush manufacturers, has left England by the *City of New York*, for a business-trip to the United States and Canada. His address will be, "Care of Messrs. McKesson & Robbins, 91 and 93 Fulton Street, New York."

MR S W. FAIRCHILD, of the firm of Messrs. Fairchild Bros. & Foster, New York, and president of the New York College of Pharmacy, has left America on a journey with his family on account of the continued illness of Mrs Fairchild. He will attend the Jubilee dinner of the Pharmaceutical Society.

MR. GEORGE J. KERR, who has been twenty-one years with Mr. Agnew, Great Horner Street, Liverpool, has purchased the stock and fittings of the shop, and has opened a business at Derby Road, Honyton, near Liverpool. Mr. Agnew's shop was the first fitted up by Mr. W. D. Yates, of Liverpool, some thirty years ago.

THE will, dated January 28, 1891, of Mr. John Greenwood, pharmaceutical chemist, late of Harrogate, who died on February 16, was proved on April 4 by Mr. Charles Greenwood, the brother and sole executor, the value of the personal estate amounting to over 47,000*l*. The testator bequeaths 500*l*. to each of his nephews and nieces, an annuity of 100*l*. to his sister, Mary Gann, for life, and an annuity of 50*l*. to his sister, Ann Smith, for life. The residue of his real and personal estate he gives to his said brother Charles.

MR F. J. HORNIMAN, the tea merchant, has retired from the position of candidate for election as one of the sheriffs of the City of London for 1891-92 on account of ill-health, his physicians having peremptorily ordered absolute rest. Mr. Horniman had taken the necessary preliminary steps for giving to the nation, through the Corporation of the City of London, his well-known natural history museum, but it is feared that his serious indisposition may postpone the execution of the generous intention. Mr. Horniman has also relinquished his candidature for the parliamentary representation of Shrewsbury.



THE WARNER CORNER.
THE case of *Salaman v. Warner*
and Others, which we reported on
April 18 last, when it came before Mr.
Justice Day and Mr. Justice Lawrance,

sitting as a Divisional Court, was heard by the Court of Appeal (the Master of the Rolls with Lords Justices Fry and Lopes) on Tuesday last. The plaintiff alleged conspiracy against the defendants (H. H. Warner, James Coates, Edward Coates, and H. S. Foster), who, he alleged, to increase their profits in the formation of the company, conspired together to make large purchases of shares in the company, knowing they would be able to control the allotment, and intending so to control it that they would hold the bulk of the shares in their own hands; that, to succeed in this conspiracy, they caused to be issued to the public a prospectus inviting subscriptions to the company, in which it was stated that the whole of the shares and debentures (except one-third, which formed part of the purchase-money) were offered for public subscription at par, and that it was intended to apply for a Stock Exchange quotation (which, as the defendants and the public knew, would not be granted unless two-thirds of the shares were *bonâ fide* allotted to the public); and this statement was, it was said, intended to and did induce the belief in the plaintiff and the public generally that that proportion of shares was *bonâ fide* allotted to the public; that the defendants availed themselves of such belief, and proceeded to make large purchases of the shares, and, having thus obtained contracts for the sale of shares in the company to them or their nominees, the defendants then conspired to make performance of such contracts by the sellers impossible of performance, except at such cost as the defendants might choose to exact; and that the plaintiff, having been thus induced to make contracts for the sale of such shares, found himself unable to fulfil his contracts except by purchasing shares at a greatly enhanced price, and suffering heavy losses thereby. He claimed 7,250% as damage. It was objected by the defendants that this statement of the case disclosed no cause of action, and the Divisional Court so held. The plaintiff appealed.

Mr. Finlay, Q.C., Mr. Moulton, Q.C., and Mr. Willes Chitty were for the plaintiff; the Solicitor-General, Mr. Cock, Q.C., and Mr. A. T. Lawrence for the defendant Warner; Sir Charles Russell, Q.C., and Mr. Sutton for the defendant Coates; and the Attorney-General and Mr. Abrahams for the defendant Foster.

After hearing counsel the court dismissed the appeal.

The Master of the Rolls said that plaintiff had no such legal right as he asserted. It was said that the defendants had indirectly made to the plaintiff a false statement in order that he might act upon it, and that he did act upon it, and thereby suffered damage. If that was so there was a cause of action disclosed on the statement of claim. But on going carefully through the whole statement of claim no such allegation could be found. The plaintiff had entered into the contracts as to the shares admittedly before the alleged false representation to the Stock Exchange took place, so it was clear that that could not be relied upon. Even assuming that the defendants had made false statements they had not been made to the plaintiff or to anyone who could reasonably be expected to communicate them to him, and there was no allegation that such statements were ever made known to him or acted upon by him. It was clear that the plaintiff had acted independently on what he thought to be the chances of the success of the company, and not on anything that the defendants had done, and

therefore the case as to the action of deceit fell to the ground. But then it was said that the defendants had entered into an illegal conspiracy as the result of which the plaintiff had suffered damage, and that he was therefore entitled to a right of action. It was not true to say that a civil action could be brought for a conspiracy. If persons conspired to do an illegal thing, or to do a legal thing in an illegal way, they were liable to an indictment and not to an action. They were only liable to an action if they conspired to do something against the rights of the plaintiff, and had effected their purpose and committed a breach of those rights. The plaintiff must, therefore, show that the conspiracy was to injure his rights, and that those rights had been injured. He had, in fact, to carry his case as far as if there were no conspiracy at all. The fact of there having been a conspiracy did not increase his right of action in the least, though it did not diminish it. Both on principle and authority he came to the conclusion that the statement of claim disclosed no cause of action whatever.

Lords Justices Fry and Lopes concurred.

Leave to amend the statement of claim was refused.

THE USE OF MEDICAL TITLES.

AT the Aston Police Court, on Tuesday, Samuel Edwin Lambert Smith, medical practitioner, was summoned at the instance of Charles Clarke for unlawfully using the title of doctor of medicine, and, further, with describing himself as surgeon and physician. The proceedings were instituted under section 40 of the Medical Act of 1858, which declares that anyone who shall wilfully and falsely pretend to be, among other things, a doctor of medicine or physician shall be liable to a penalty not exceeding 20%. The defendant appears in the Medical Register as a Licentiate of the Apothecaries' Society, 1885. Complaints had been made by the Medical Defence Union of the assumption by the defendant of titles to which he had no legal right. Defendant answered that he did not assume anything to which he was not legally entitled. A paper in the defendant's handwriting was put in, signed "S. E. L. Smith, M.D., L.R.G.P., and L.S.A. (England)."

In answer to the question what "L.R.G.P." meant, defendant had said it meant "Legal registered general practitioner." A vaccination certificate in which defendant had used the letters M.D. was produced.

Mr. Hugo Young, who appeared for the defence, said the charge was one which he believed had never been before any court. There had been charges which had been brought against persons who, having no qualifications at all, had represented themselves as being qualified men—quacks who had practised without any medical knowledge or medical qualifications—but there had never been a charge of this kind brought before a court. This case was simply this: A qualified medical practitioner was charged because it was said that he had used a title for which he had not been registered. He referred to various sections of the Act, and submitted that so long as the defendant was a duly registered medical practitioner, which Mr. Smith was under his L.S.A. degree, there was no Act of Parliament which could prevent him adopting a higher title than the one he held. He produced a document from Indianapolis showing that Mr. Smith had passed the degree of M.D., which examination was conducted on the same lines as a University examination. He also produced a number of certificates of deaths, on which the titles had not been placed, as denoting that the defendant had no intention to deceive.

Several medical men were called for the defence, who testified that the use of the degree M.D. by men who had passed the L.S.A. examination was common, and who spoke of the ability of the defendant.

The bench retired, and on returning the magistrate said the question was a very simple one. There had been no accusation of want of qualification. The only point was the legal assumption of titles which had not been obtained. They were of opinion that the titles had been assumed without any legal right, and occasionally the public had been misled by those titles. Under the circumstances the bench were compelled to impose the maximum penalty of 20%. By consent the evidence in the first case was taken as applying to the other two summonses, and after a few more remarks by

Dr. Rogers, Mr. Young called a number of medical practitioners in Birmingham and Aston, who stated that although they only held the degree of L.S.A., they described themselves as surgeons, and in one case surgeon and physician. The magistrate said that defendant had no right to use the titles, and would be fined 40s. and costs in each case, with advocate's fee. On the application of Mr. Young a case was granted on each of the summonses.

GOODALL, BACKHOUSE & CO. v. WILKINSON AND SIMPSON.—
"YORKSHIRE" RELISH v. "CASTLE" RELISH LABELS.—
THE ACTION COMPROMISED.

On Monday, in the Court of Appeal, Lord Justices Lindley, Bowen, and Kay heard the opening of the appeal brought by the plaintiffs from the judgment of Mr. Justice Stirling on March 5 (reported in THE CHEMIST AND DRUGGIST of March 7). The plaintiffs are wholesale druggists and dry-salters of Leeds, and the defendants carry on a similar business at Newcastle-on-Tyne. The action, which was tried in February last, was for an injunction to restrain the defendants from selling or offering for sale, or attempting to pass off, or enabling or inducing others to pass off, sauce not of the plaintiffs' manufacture as that of the plaintiffs by the use of labels and of covering slips over the stoppers of the bottles, alleged to be only colourably different from those of the plaintiffs, and from infringing the plaintiffs' registered trade-mark. The trial in the court below occupied six days, a large number of witnesses being called on both sides. The defendants denied both imitation and infringement, and averred as a fact that for about twelve years they had sold their "Castle" relish in the open market. Mr. Justice Stirling, in his judgment, came to the conclusion that the differences in the defendants' label largely outweighed the resemblances. He could not, he said, think that even an unwary purchaser acting only on general impressions, whether he could read or not, would be misled by the defendants' label. He dismissed the action with costs, hence the appeal.

The Attorney-General, Mr. Graham Hastings, Q.C., and Mr. John Cutler appeared for the appellants; Mr. Aston, Q.C., and Mr. Waggett appeared for the respondents.

Mr. Graham Hastings, who opened the case for the appellants, said that the plaintiffs' firm (of which Mr. Powell was now the only representative and practically the plaintiff) had for upwards of thirty years manufactured and sold a sauce which, as "Yorkshire" relish, had obtained so great a reputation that the annual average sale was now about 6,000,000 bottles. The sauce was largely advertised. The bottles were labelled with a label which had been registered, and a covering slip was used for the stoppers. The labels were printed in red and blue, and above and below the willow-pattern plate (the registered trade-mark) were the words, "The celebrated Yorkshire Relish, prepared and sold wholesale by Goodall, Backhouse & Co., Leeds." For their "Castle" relish the defendants used a label which had not been registered (but an application to register it was pending), in the centre of which was a castle, and above and below were the words, "The celebrated Castle Relish, manufactured by Wilkinson & Simpson, Newcastle-on-Tyne." This also was a red and blue label, and he submitted that the whole "get-up" was calculated to deceive the public into the belief that they were purchasing the plaintiffs' relish. The defendant's relish appeared to be sold principally in small towns and villages in the mining and agricultural districts of four of the northern counties, and so little was it known that it was not until September, 1889, that the plaintiffs accidentally discovered a bottle bearing their label amongst some old "Yorkshire" relish bottles purchased by the plaintiffs from marine-store dealers. The plaintiffs at once wrote to the defendants, and on September 19, 1889, the defendant Simpson replied in a letter, enclosing a label then in use by his firm, stating, "We are quite of your opinion that the label you complain of was a colourable imitation, and but for a printer's slip it would not have been used by us. We had, previous to hearing from you, ceased to use the label, and destroyed what remained. What we now use we consider to be an entire absence of imitation." The learned counsel pointed out that the only difference between the two labels was that the one was light and the other dark bronze-blue; but, he submitted, there was practically

no difference, and if one was an imitation so was the other. The plaintiffs' travellers, who were commissioned to bring to the notice of their firm any cases of imitation, were until 1889 absolutely ignorant of this "Castle" relish. The learned counsel then minutely compared the two labels, and, after referring to the evidence, submitted that the judgment in the court below should be reversed.

Mr. Waggett (in the absence of his learned leader), for the respondents, pointed out that for twelve years the defendants had sold their "Castle" relish in the open market, and there was no justification for saying that their label had deceived or was liable to deceive anyone. Referring to the evidence, he submitted that there was an entire absence of proof that anyone had ever been deceived into purchasing "Castle" relish for "Yorkshire" relish.

Before the court adjourned on Tuesday, Lord Justice Kay said it occurred to him that there would be an end of the matter if the defendants undertook to print their labels in blue and white or red and orange, or some colours distinct from the plaintiffs'.

Mr. Aston said the defendants were at all times willing to meet the plaintiffs, but they gave them no opportunity after the action was commenced. He was quite willing to accept any suggestion which the court might make; but it must not be forgotten that the defendants had the judgment of the court below in their favour, saying that they had done no wrong.

Lord Justice Bowen: You must not rest too securely on that.

Mr. Aston: I know that this court may reverse the judgment of the court below.

In the absence of the Attorney-General and Mr. Graham Hastings, the matter was ordered to stand over until the following morning for the consideration of both sides.

On Wednesday the Attorney-General informed the court that the parties had agreed to an order in the following terms:—

"Injunction by consent. The plaintiffs not to advertise in any way that an injunction has been obtained. The defendants' application to register their label to be abandoned. No costs on either side with regard to any proceedings. The defendants to undertake to submit the label to be used by them to the Attorney-General and to Mr. Aston, any question of form, colour, or letterpress to be settled by them, and in the case of difference to Mr. Chadwyck-Healey. No proceedings to be taken in respect of any labels already used by the defendants."

Lord Justice Lindley: That is much better than any order by the court.

Mr. Aston desired to add that the defendants had entered into this transaction *bonâ fide* and in the belief that they did not touch the rights of anyone else. They were desirous of avoiding every question in future, and therefore they accepted the suggestion which fell from the court on the previous day.

Lord Justice Kay: Both parties have fallen very fairly in with the suggestion.

Order as arranged accordingly.

BANKRUPTCY REPORTS.

Re A. E. POWELL & Co, Swindon, Proprietors of
"Moonseed Bitters."

At the Swindon County Court, April 22, before Deputy-judge Fraser, the Official Receiver (Mr. H. C. Tombs) applied for a warrant of seizure, under the Act, against the goods of the defendants, Messrs. A. E. Powell & Co., of Swindon, proprietors of "Moonseed Bitters." He stated that on the previous Tuesday he instructed Mr. C. Bishop, an auctioneer, of New Swindon, to take possession of the premises. He was not only refused admission, but the debtor's wife alarmed the bailiffs by appearing at the window with a gun. Mr. A. W. Boodle, on behalf of Messrs. Powell & Co., maintained that, as there had been no adjudication, but only a receiving order, which was being appealed against, the court had no power to order the issue of the warrant. There was no pretence for stating that the goods were going to be removed by the debtor. It was a question whether there would be

any estate as between the debtor and the creditors, who moved for the receiving order. It would be strongly contended that the goods against which the order was made were not, and never had been, the property of the debtor, but of his largest creditor. His Honour, in granting the warrant, said he thought it was the more necessary, in view of the hint thrown out by Mr. Boodle, that the ownership of the property would be disputed, that the Official Receiver should protect the estate. Mr. Boodle asked that the warrant should be suspended for a-eight hours. The Official Receiver observed that the debtor in keeping out of the way was virtually committing contempt of court. His Honour saw no reason for suspending the order. If he said anything on the case he should express himself strongly, as he had had to issue a number of receiving orders against the debtor at other courts as well as that.

Re CHESTER A. GORTON, 397 City Road, Wholesale Perfumer.

THE receiving order made against this debtor on March 14 last was upon a judgment summons. Accounts had been filed at the London Bankruptcy Court showing debts 239*l* 1*s*. 9*d*, and no assets. The debtor makes no proposal; he has been adjudicated bankrupt, and an order for summary administration has been made by the court. The debtor commenced business in 1876 as a perfumer, without capital, at the above address, and about eighteen months ago opened a general store at New Barnet, which he closed after four months, having loss about 100*l*.

Re W. E. CRASSWELLER, JUN., 16 Upper Brook Street, Ipswich, Chemist and Druggist.

A FIRST meeting of the creditors of this debtor was held at the office of the Official Receiver (Mr. F. Messent), on Tuesday afternoon, April 23. The gross liabilities were 1,787*l* 16*s*. 1*d*, of which 29*l*. 9*s* 6*d*. was due to preferential creditors. The assets were estimated by the debtor at 703*l*. 19*s*. 9*d*. The details of the account and the Official Receiver's observations have already been reported in THE CHEMIST AND DRUGGIST. The creditors for sums over 10*l*. were as under:—

	£	s.	d.
Bell, W. H., grocer, Brook Street, Ipswich	16	15	11
Burnstein, Burnett, money lent	20	19	2
Cowell, S. H., stationer, Ipswich	10	14	6
Crassweller, W. E., Senr., Bury St. Edmund's, money lent	375	0	0
Grimwade, Ridley & Co., Ipswich, druggists ..	26	5	10
Hearon, Squire & Francis, Southwark Street, London	56	17	10
Jacobs, Brighton, money lent	24	0	0
Kersey, W. E., solicitor, Ipswich, money lent on the debtor's wife's life interest	253	2	6
Lyon, Alfred, Ipswich, money lent	100	0	0
Mills, R. M., soda manufacturer, Lincolnshire ..	266	13	4
Maw, Son & Thompson, London	25	10	5
National Provincial Bank, money advanced ..	200	0	0
Pollard, J. M., solicitor, Ipswich	32	17	0
Raphael, A., Ipswich, money lent	27	0	0
St. Clements Glass Co., York	12	11	5
Sutton & Co., Chigwell Street, London	70	0	0
Titchmarsh, J. F., Ipswich, money lent	45	0	0
Watts, Whitehouse & Co., Westminster	19	5	1

At the meeting, Mr. W. Marshall appeared for the debtor. Mr. Messent said he believed the statement made by the debtor was fairly accurate. Mr. Ridley had gone over the place, and believed that the rough estimate placed upon the goods by Mr. Crassweller was as near as could be obtained. It was much to be regretted that Mr. Crassweller had got into this muddle. He paid 1,000*l*. for the stock and goodwill, and Mr. Ridley believed he had very good value for it. He had not carried on the business as he should have done, part of his time having been spent on outside matters, which had evidently distracted his attention. Mr. Alderton inquired whether the debtor had not transacted other business besides the chemist's. Mr. Messent: I am afraid a good deal of betting has been going on. Mr. Alderton said he had been told the debtor had been buying a large quantity of bricks. Mr. Ridley inquired whether any offer was

to be made to the creditors. Mr. Marshall replied in the negative. Mr. Crassweller, on being called into the room, denied there was any foundation for the report mentioned by Mr. Alderton. Mr. Messent feared the reversionary interest might not produce what was stated, as under it the debtor had agreed to pay interest, which might be set off against anything recoverable. Mr. Messent was appointed trustee. He said he had kept the business open, as it would sell better as a going concern, and it had paid its expenses. He did not usually like to carry on a business, but he thought it desirable to do so in this case, as in the event of a suitable offer he should at once consult the largest creditors. Several replies to the advertisement had been received.

NEW COMPANIES.

MORRIS'S DRUG STORES (LIMITED)—Capital of 1,000*l*., in 1*l*. shares. Objects: the purchase of a drug business, and the carrying on of business as chemists and druggists, &c. The first subscribers (who take one share each) are:—W. Morris, 2 Park Road, Liverpool, drug and patent-medicine dealer; J. Ann Morris, 2 Park Road, Liverpool; F. W. Treadaway, 39 Pimhill Street, Liverpool, dispenser; Sarah F. Bromington, Whitechurch, Salop; John Cooke, 13 Rowland Street, Salford, clerk; T. K. Abell, St. Helens, electrician; J. C. Barnes, Everton, Liverpool, clerk. Registered without articles of association.

LIVERPOOL MINERAL-WATER COMPANY (LIMITED).—Capital, 10,000*l*., in 10*l*. shares. Objects: to acquire the business now carried on by the Liverpool Mineral-water Company at Liverpool, Birkenhead, and Chester, and to develop and extend the same. The first subscribers (who take one share each) are:—T. Jones, Beresford Road, Oxtun, mineral-water manufacturer; E. J. Bounphrey, Wavertree, secretary, Liverpool Mineral-water Company; Isabella Jones, Beresford Road, Oxtun, wife of T. Jones; A. Isabel Jones, of the same place, spinster; Ada E. Jones, of the same place, spinster; Sarah E. Richards, of the same place, widow; J. E. Dickinson, South Castle Street, Liverpool, blockmaker. Mr. Thomas Jones is the first director of the company. Qualification, 5,000*l*. Remuneration, 300*l*. per annum.

Gazette.

PARTNERSHIPS DISSOLVED.

Adamson, Douglas, Hallas & Co., Dewsbury, glass-bottle makers; as far as regards W. Adamson.

Hedley, J., & Pryde, G., under the style of J. Hutchinson & Co., Widnes and Liverpool, manufacturing chemists.

Heppell, T. & J., under the style of Leppell & Co., Haymarket, S.W., chemists and druggists.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDERS.

Greenway, James Riley, Tunbridge Wells, doctor of medicine.

Powell & Co., A. E., Swindon, manufacturers of Moonseed Bitters.

Thomas, Daniel Griffith, Cardigan, chemist and druggist.

Tibbitts, Herbert, Wimpole Street, Welbeck Street, York Terrace, Regent's Park, and Romford, physician.

The following amended notice is substituted for that published in the "London Gazette" of April 21, 1891:—

Crassweller, William Ells, jun., Ipswich, chemist and druggist.

ADJUDICATIONS.

Crassweller, William Ells, jun., Ipswich, chemist and druggist.

Gorton, Chester Aldridge, City Road, E.C., wholesale perfumer.

White, William Stokoe, Moss Side and Manchester, chemist's assistant.

TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, within one month of the date of this journal give notice in duplicate, at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1890, of opposition to such registration." All communications to be addressed to H. Reader Lack, Esq., Comptroller General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

(From the *Trade Marks Journal* April 15, 1891.)

"SENGA," and other wording on label; for medical lotions. By A. L. Wilhelmine Hast, 19 Belmont Terrace, Stoke Newington Common, N. 150,426.

"KOMO," and other wording on circular label; for an ointment. By Mary Armitage, 19 John Street, Huddersfield. 153,868.

"H. V. C." and other wording on picture resting on easel; for a medicinal compound. By W. R. Hayden, 55 & 56 Chancery Lane, London. 154,032.

"CALVERT'S CURATIVE POWDER," and other wording on circular label; for a sanitary powder, and for a toilet preparation. By F. C. Calvert & Co., Bradford. 154,173, 154,174.

Circular design with German wording; for medicinal pastilles. By C. F. Redfern & Co., 4 South Street, Finsbury. 154,289.

"BULL'S BRAND," and picture of a bull; for mineral and aerated waters. By Ihlers & Bell, 30 Moor Street, Liverpool. 152,223.

"ZOLAKONE," for mineral and aerated waters. By Ainsworth, Clayton & Jowett, Concert Street, Liverpool. 152,530.

"SILVESTER, LISSON GROVE," for aerated and mineral waters. By F. W. Silvester, 21 & 22 William Street, Lisson Grove, London. 152,681.

Sketch of a whale blowing, and wording on label; for artificial apollinaris-water. By Ingram & Royle, 52 Farringdon Street, London. 153,705.

Sketch of banana-tree and negroes; for mineral and aerated waters. By R. H. Coall, 44 Bedford Square, W.C. 154,017.

Signature of applicant, and other wording; for toilet preparations. By John Steedman, 154 Queen's Road, Bayswater, W. 153,052.

"SOZODONT," and other wording on label; also artistic label bearing signature; for dentifrices. By W. H. Hall, trading as Hall & Ruckel, 46 Holborn Viaduct, E.C. 154,088, 154,089.

(From the *Trade Marks Journal*, April 22, 1891.)

"INMAN'S COUGH BALLS," for a veterinary preparation. By J. H. Inman, 45 Northumberland Street, Newcastle-on-Tyne. 153,396.

Picture of Arab on horseback on fanciful label; for an insecticide. By J. Neumann & Co., Fiume, Hungary. 154,097.

"RAZZIA," for an insecticide. By J. Neumann & Co., Fiume, Hungary. 154,098.

"ROMERO'S COCA WINE," for a medicated tonic-wine. By W. F. Pickering, 47 Norfolk Square, London. 150,984.

"ROLERA," and sketch of a man's tie and collar; for a patent medicine. By J. A. Brookfield, 25 Change Alley, Sheffield. 153,094.

Sketch of a whale blowing, with signature and wording on label; for chemical substances used in medicine and pharmacy, and for mineral and aerated waters. By Ingram & Royle, 52 Farringdon Street, E.C. 153,703, 153,704.

"G. S. MASTERS' TONIC," and outline sketch of landscape, flowers and bird; for a medicine for human use. By G. S. Masters, 45 Pall Mall, London. 154,279.

"PAPAIN PEPTON," and sketch of branch bearing fruit; for medicinal preparations. By B. Kühn, 36 St. Mary-at-Hill, London. 154,257.

Representation of bird standing on ball balanced on rope; for seltzenes, gasogenes, &c. By Chinnery & Co., Leadenhall Buildings, London. 153,120.

"MEDICATED CATTLE FOOD ESSENCE," on circular design, with signature; for a cattle-food. By T. B. Yeoman, trading as W. G. Harrison & Co, 38 Fox Street, Liverpool. 154,794.

"HYGIENIC MINERAL WATER CO.," and other wording on oval-shaped label; for mineral and aerated waters. By the Hygienic Mineral Water Co., the Medical Hall, Blackrock, Dublin. 153,903.

"MONODENT," and other wording on label; for tooth-powders. By E. W. P. Marcus, High Street, Wood Green, N. 154,153.

"ALCAZAR BOUQUET," for all goods in Class 48. By J. Sinclair & Son, 65 Southwark Street, London. 154,469.

(From the *Trade Marks Journal*, April 29, 1891.)

"KODAK," for photographic chemicals, &c. By the Eastman Photographic Materials Company (Limited), 115 Oxford Street, London. 154,848.

"JOHN CHARLES MASON," as signature; for an embrocation for horses and cattle. By J. C. Mason, British Grove, Chiswick. 150,915.

"CROWN DIAMOND," for artificial manure, cattle-medicines, insect-powder, &c. By S. R. Hurst, trading as the "Crown Diamond" Manufacturing Company, 123 Boyson Road, Camberwell, London. 154,312.

Sketch of peculiarly-shaped cross, and motto; for chemical substances for use in medicine and pharmacy. By Grant & Co, 60 Lower Breck Road, Anfield, Liverpool. 154,910.

"GRANDMOTHER'S OINTMENT," and signature; for an ointment. By J. Whewey, Wigginton, near Tamworth. 153,777.

"SEBROMA SALVE," for an ointment. By A. Tapp, trading as Tapp & Co., 18 Queen Margaret's Grove, London, N. 154,428.

"THE SCENT OF AN OLD GARDEN," with picture of garden and figures; for a perfume. By T. W. Carnie, trading as G. Vogt & Co., 19 Laurence Pountney Lane, London. 154,054.

DEEDS OF ARRANGEMENT.

The following deeds of arrangement with creditors have been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1887. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision in the Act, making any of these arrangements binding upon dissenting creditors.

Fletcher, Charles, 46 Alfreton Road, Nottingham, Chemist and Druggist. Trustee: Chas. Rogers, Willoughby House, Low Pavement, Nottingham (C.A.). Dated, April 23; filed, April 25; unsecured liabilities, 412*l.* 1*s.* 8*d.*; estimated net assets, 285*l.* The following are scheduled as creditors:—

	£	s.	d.
Bratnoll, W., Nottingham	22	10	0
Fletcher, D., Nottingham	15	0	0
Fletcher, T. B., Nottingham	57	10	0
Gamble, R. B., Nottingham	10	0	0
Marriott, J., Nottingham	51	13	0
Marshall, Jno., Nottingham	21	5	11
Mee, J., Nottingham	18	10	0
Miller, W., Nottingham	32	0	0
Phoenix, C., Nottingham	11	1	10
Widdowson, F., Nottingham	48	0	0

Lamb, Charles (trading as Charles Lamb & Co.), 60 Mark Lane, E.C., and 3 Beacon Road, Lewisham, chemical merchant. Trustee: William B. Keen, 3 Church Court, Old Jewry, E.C. (O.A.) Dated April 16, 1891. Filed April 23, 1891. Unsecured liabilities, 2,556*l.* 8*s.* 8*d.*; estimated net assets, 431*l.* 4*s.* 6*d.*. Assignment with a view to payment of a composition of 7*s.* 6*d.* in the pound, by six equal instalments of 1*s.* each, and one of 1*s.* 6*d.*, at equal intervals of six months, the first payable as soon as sufficient is realised for same. The following are scheduled as creditors:—

	£	s.	d.
Adley, Folke & Co., Blackburn	56	2	2
Arthy, C. G., London	47	10	0
Binney & Son, London	62	8	9
Blagden, W. G., London	25	0	0
Bouke, Roberts & Co., Stratford	38	2	1
Bowley, S., & Son, London	58	6	1
Brunner, J. P. & Co., Liverpool	59	12	1
Central Bank of London, London	42	13	5
Chapman, S., & Co., London	14	1	9
City Bank, London	83	0	0
City of London Real Property Company, London	25	1	0
Cohen, Mr., London	57	1	6
Corbett & Co., Ruabon	10	18	5
Foster & Gregory, London	83	18	10
Hall, London	12	10	0
Harris & Pearson, Stourbridge	10	0	0
Haslemann, W. H., London	35	0	0
Hearn, G., London	11	4	6
Hemlugway & Co., London	12	13	1
Higginbotham & Co., Manchester	23	15	5
Hills, F. C., & Co., London	17	18	9
Keen, W. B., London	76	4	4
Lambert, H., London	144	19	5
Lamb, H. Runni	52	10	6
Lamb, W., Brighton	35	7	2
Leamont, R. K., Newcastle-on-Tyne	34	4	0
London & South-Western Bank, London	213	11	5
Lorenz, Hugo, London	35	16	5
Luke A. L., & Co., London	59	16	2
May & Baker, London	55	6	11
Petri Bros., London	26	14	9
Stamford & Spalding Bank, Stamford	35	1	3
Stewart, E., Rochester	2	0	0
Stuart, E., London	1	5	0
Tickel, Japheth, London	11	0	10
Uhlmann & Co., Hamburg	14	19	9
Widnes Alkali Company, Widnes	23	19	5
Wright, C. R., London	45	10	0
Zumbeck & Co., London	35	0	0

Sharpe & Barron, 34 Shearbridge Road, Bradford, manufacturing chemists and mineral-waters manufacturers (Partners: Ivy Riley Sharpe, 80 Fieldhead Street, Bradford, and Michael Barron, 27 Leatham Street, Bradford; trading as). Trustee: John Butterfield, Charles Street, Bradford (C.A.). Dated April 25, 1891. Filed April 27, 1891. Unsecured liabilities, 416*l.* 0*s.* 11*d.*; estimated net assets, 797*l.* 14*s.* 4*d.*. Deed of arrangement with a view to payment of creditors in full by four equal instalments, on August 1 and November 1, 1891, and August 1 and November 1, 1892. With assignment of debtors' joint and separate estates upon trust until default. The following are scheduled as creditors:—

	£	s.	d.
Crosley, Bradford	50	0	0
Duckworth & Co., Manchester	21	0	0
Frecman & Harper, Bradford	23	0	0
Gardner, Charles, Bradford	67	10	0
Hainsworth, Clayton & Co., Blackburn	18	6	1
Hargreaves, H., Bradford	57	10	0
Holdroyd, A., Bradford	18	0	0
Maskell, George, Bradford	12	0	0
Thompson Bros., Bradford	10	0	0
Wood, George, Leeds	48	3	1

COLLODION OF SALOL, useful in acute rheumatism, is obtained by dissolving salol 4 in ether 4, and adding to collodion 30 parts.—*Rép. de Phar.*

MALIC-ACID LOZENGES have found considerable favour as a remedy for sore throat and bronchial cough. They are efficient not only in excessive secretion of mucus and cough, but also in catarrhal conditions of the bowels and in hæmorrhoids.

THE PURITY OF POTABLE WATER.

AT the annual meeting of the Bristol Pharmaceutical Association, held on April 21—Mr. J. W. White, President, in the chair—Mr. G. F. Schacht contributed a valuable "Discussion and Illustration of certain recent Suggestions in Water Analysis."

Mr. Schacht stated that the subject of the analysis of well-waters was far too large for proper consideration in one evening, but he would like (in drawing the attention of practical pharmacists, as he was about to do, to one point in that subject) to take the opportunity of pointing out how very useful it might be found in the practice of their business to be able to pronounce with something like confidence upon the purity or unwholesomeness of any sample of water brought to them by a doctor or customer: he strongly recommended the subject as one both of scientific interest and of promising business advantage.

The special point he had that evening to talk about was a recent suggestion to employ a "couple" of aluminium and mercury for the evolution of the hydrogen in the well-known process for the estimation of nitrogen existing as nitrates and nitrites in the sample. Messrs. Ormandy and Cohen had published this suggestion, and their paper had appeared in the journal of the Chemical Society for September of last year.

He had taken some pains to assure himself of the accuracy of the method, and, with the modifications to which he would presently refer, it became so easy of execution that he recommended its adoption with confidence.

Mr. Schacht then proceeded to show the process in detail, and to describe it thus:—Measure 100 c.c. of the sample into a plain upright glass vessel of capacity equal to about 150 c.c. Take a strip of aluminium foil (about 3 inches of ordinary ribbon = 0.4 gramme), clean both surfaces by rubbing with tow dipped in liquor sodæ, wash thoroughly and dip it into a solution of mercuric chloride (half a saturated solution and half water) for one minute. A deposit of mercury takes place upon the aluminium, and a "couple" is formed. Wash it well under the tap, put it at once into the 100 c.c. of the sample, and cover the glass vessel loosely. Let these react until the metals become a deposit and no more gas is evolved. Gently stir the mixture and allow the deposit to subside.

Take 10 c.c. of the clear supernatant liquid, dilute with 90 c.c. of pure water, and add 1 c.c. of Nessler's solution. Note the colour. Perform a comparison experiment in the usual way with standard solution of muriate of ammonia 0.0001 gramme of NH_3 to each c.c. Then x being the number of c.c. of sol. ammon. mur. required $0.0001 \times x \times 10^7 \times 700$ = grains per gallon of ammonia, and this figure multiplied by 0.823 = grains per gallon of nitrogen.

In experiments which aim for exact results, it is better to close the mouth of the vessel with an indiarubber stopper through which passes a glass tube bent so as to allow the gases to pass through a small quantity of water, which should be mixed with the sample before the final stirring.

In illustration of the accuracy of the process, Mr. Schacht presented a table of a series of experiments made with definite solutions of potassium nitrate.

Experiments.	Quantity of N. used as Pot. Nit.	Quantity of N. found as NH_3 .
	Gramme.	Gramme.
1	0.001	0.00096
2	0.001	0.00098
3	0.001	0.00091
4	0.001	0.001
5	0.002	0.00182
6	0.003	0.003
7	0.003	0.003
8	Pure water only	0.00000

ANIMAL WAXES are taxed in Italy according to their degree of purification, and at a higher rate than vegetable waxes, such as those of carnauba, Japan, &c., which are referred to stearic acid. Mixtures of animal wax with the vegetable waxes or with stearic acid, spermaceti, &c., are assessed as animal waxes.

"VETERINARY COUNTER PRACTICE."

CRITICISMS are beginning to come in, and, so far as they offer any useful hints, we are desirous to make use of them. One purchaser writes:—"On page 11 you state that the dose of aloes for carriage and cart horse is the same. This is surely not correct." The dose should have been printed ʒviij. for heavy cart-horses, though ʒvj. is enough, if properly prepared, with masbes.

Another chemist writes:—"I cannot find pink eye in horses, and remedies for the same, in your 'Veterinary Counter Practice.'"

PINK EYE

is a form of horse-sickness which was first called by this name in America, but is now known all over Europe as influenza, and, like its congener in man, takes different forms. In nearly all there is intense redness of the conjunctival membrane of the eye, rapid rise of temperature, depressed heart-action, and excessive debility. It may run on to inflammation of the lungs, the liver may suddenly fail in its functions, and the red eye look yellow, or muscular pains cause lameness, and spinal symptoms, as paralysis, follow.

With such a hydra-headed monster it is difficult to lay down any one plan of treatment, but it is essential to advise the immediate nursing of smitten animals. In nearly all cases it will be safe to give a stimulant, as follows:—

Ammon. carb.	..	..	..	..	3ij.
Ext. gent.	..	..	..	..	3ij.
Spt. æth. nit.	..	..	..	..	3j.
Aq. al.	..	..	..	..	3xvj.

M. Ft. haust.

One of our most eminent veterinary surgeons (Mr. Greaves, of Manchester) speaks of the blood-vessels of the extremities as being absolutely empty and pulseless at one period of the disease. To counteract this tendency to collapse should be the first care of the veterinarian. The legs should be bandaged and body clothed, the stable kept warm but well ventilated, and, after a few stimulants have been given at intervals of four hours or so, the treatment should be directed to the alleviation of any special symptoms. If the patient comes on "blowing," the sides of the ribs should be stimulated with mustard or an ammonia liniment.

The bowels should be regulated by small doses of mag. sulph., ʒij. to ʒvj. daily, with pot. bicarb. ʒj. and pot. nit. ʒss.

Belladonna is a favourite remedy with some vets, who give ʒj. to ʒiv. of extract nocte maneque. It may almost be said that any and every tonic should be given after the first acute symptoms have passed away. Of the many agents the Pharmacopœia offers we prefer tinct. ferri perchlor. in ʒj. doses, and extract. gent. in ʒij. to ʒiv. doses alternately; the latter may be given as an electuary or in solution. Balls should be avoided in all diseases accompanied by sore throat. Mustard or liniments to the throat also give relief.

The parotid and submaxillary glands often become enlarged, and have a tendency to remain so. One of the best remedies for reducing them after the disease has spent itself is 1 part of iodine to sapo mollis 20 parts, bis hebdomada—as an external application, of course.

Carrots, masbes, linseed, scalded corn, steamed hay, and everything that can moisten the food and tempt the invalid should be adopted, as loss of appetite is a common symptom. When convalescent, great care should be exercised in getting the patient to work, which should be done by slow degrees.

UNG. ALTHÆÆ,

as recommended on page 154, for inflammation of cows' udders. "Caledonia" asks for a formula for it. It is simply a soothing ointment that is required, and the compound known under the above name is as good as any. The usual form for making it is as follows:—

Ol. palmæ	..	..	..	..	lb. ss.
Resin. flav.	..	..	..	..	lb. iss.
Cera flav.	..	..	..	..	lb. ij.
Ol. lini	..	..	..	..	lb. ix.
Ol. myristic. and ol. rosmarin.	..	..	..	..	q s.

The ointment under the name quoted was official in the London Pharmacopœia of 1748, and was made with the obsolete "oil of muellages," and thus acquired a right to the name. The formula was: the oil named, 2 lbs.; with ½ lb. of beeswax, 3 oz. of yellow resin, and ½ oz. Venice turpentine.

"Caledonia" says:—"I find the 'Veterinary Counter Practice' of incalculable benefit. The book is just what was required—concise and reliable. You deserve the thanks of all country chemists."

W. G. S., who considers the treatise most useful, points out an error on page 178, where, in describing a dangerous application for the fly in sheep, arsenic 4 oz. and arsenic 1 oz. are printed. The extra ounce of arsenic would not be of much importance; but it had better be omitted, and 4 oz. of pearlash substituted for it, to render the rest more soluble.

The book, to which the foregoing comments refer, is published at THE CHEMIST AND DRUGGIST OFFICES, 42 Cannon Street, London, and Fink's Buildings, Melbourne. Price 3s. 6d.; post free, 3s. 9d.; pp. 268.

CONTENTS:—Medical and Surgical Treatment of Domestic Animals; Veterinary Medicines; Miscellaneous Veterinary Formulæ; Diseases of the Horse; Lameness in Horses; Dentition of the Horse; Diseases of Cattle; Diseases of Sheep; Diseases of Pigs; Diseases of Dogs; Treatment of Eye Diseases; Wounds, Sores, &c., in Animals; Diseases of Poultry; Appendix.

We have now caught up with the demand for this work, and are supplying orders promptly. From what we have heard already the book seems to be highly appreciated.

We must remind purchasers that we cannot send copies of any of our publications for enclosure. Any of the wholesale houses will supply them. The following firms have already undertaken to stock "Veterinary Counter Practice" and our other manuals, and will supply any of them at the published price:—

Ayrton & Saunders, 149 Duke Street, Liverpool
 Barclay & Sons (Limited), 95 Farringdon Street, E.C.
 Bleasdale, Wm., & Co., York
 Boileau & Boyd, 91-93 Bride Street, Dublin
 Clay, Dod & Co., 52 St. Anne Street, Liverpool
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 Evans, Sons & Co., 55 Hanover Street, Liverpool
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 Glasgow Apothecaries' Company, 32 Virginia Street, Glasgow
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 Ismay, John, & Sons, Newcastle-on-Tyne
 Lennon, B. G., & Co., Port Elizabeth
 Lennon & Tebb, Cape Town
 Lewis, H. K., 133 Gower Street, W.C.
 Lloyd, T. Howard, & Co., Leicester
 Maw, S., Son & Thompson, Aldersgate Street, E.C.
 May, Roberts & Co., 9 Clerkenwell Road, E.C.
 Newbery, F., & Sons, King Edward Street, E.C.
 Nowsholme, G. T. W., 74 Market Place, Sheffield
 Oldfield, Pattinson & Co., 17 Todd Street, Manchester
 Pinkerton, Gibson & Co., Edinburgh
 Potter & Clarke, Ravel Row, Artillery Lane, E.
 Raimes, Clark & Co., Edinburgh
 Raimes & Co., York
 Sanger, John, & Sons, 489 Oxford Street, W.
 Silverlock, H., 92 Blackfriars Road, S.E.
 Southall Bros. & Barclay, Birmingham
 Sutton, W., & Co., 76 Chiswell Street, E.C.
 Thompson, John, Hanover Street, Liverpool
 Woolley, James, Sons & Co., Manchester
 Wyleys & Co., Coventry

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 Alpe's "Medicine Stamp Duty." (142 pages.) 2s. 6d.; by post 2s. 9d.
 Proctor's "Pharmaceutical Testing." (176 pages.) 2s. 6d.; by post, 2s. 9d.



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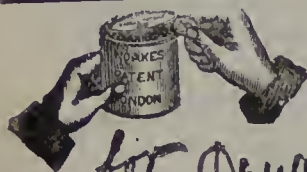
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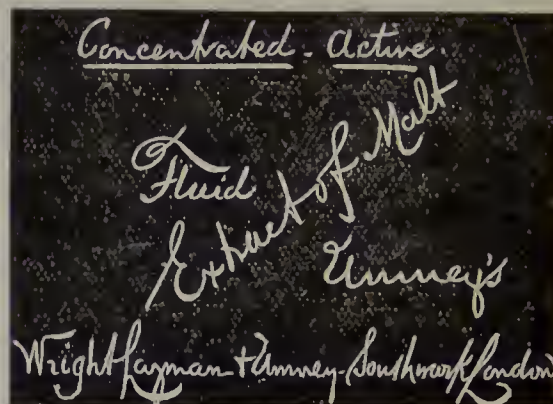
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SEE PAGE 40.

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INFLUENZA.

It is always difficult to get up a second scare, and that is
perhaps the reason why influenza has been amongst us for
weeks with so little notice being taken of it. It is un-
doubtedly epidemic, though perhaps the cases are not so

A Copy of this Supplement is inserted in every number issued of "The Chemist & Druggist."

The Chemist and Druggist

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1.—£900.—LONDON, N.W.—Established Business, situate in a main road; returns over £900, largely cash; well-fitted shop and good stock; house held on lease; price £750.

2.—£950.—LONDON SUBURB.—Good locality; Retail and Dispensing Business, situate in a busy locality; returns £950 yearly, increasing; first class profits; good 8 roomed house, held on long lease; price, including lease, about £900.

3.—£900.—LONDON, N.—Dispensing and Retail; established many years; returns between £800 and £900 yearly, very largely from Proprietaries; good stock, handsome shop, and good house, held on beneficial lease, which will be included in sale; terms on application.

4.—£500.—LONDON, S.E.—Old established Business, situate in a very busy locality; returns £500 yearly; Post Office attached; house held on lease at low rental; double-fronted shop; convenient house; price £475.

5.—£850.—LONDON, N.—Good class Family Business, Retail and Dispensing; returns about £850 yearly, good profits; large handsome shop and good stock; price about £600.

6.—£1,650.—ESSEX.—Easy distance from town.—Old-established Business; commodious shop; returns £1,650; mixed profitable trade; very good house and garden; vendor would not object to a short partnership, for the purpose of introduction, with a suitable man.

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8.—£800.—SUSSEX.—Dispensing and Retail; returns £800; double-fronted shop and good house, garden, and conservatory; price £550.

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12.—£800.—SURREY.—Dispensing and Retail, with Post Office; returns between £750 and £800; profits fully up to average; single-fronted shop and good house; private entrance and garden; rent £60, on lease; about £650 required, or valuation.

13.—£500.—DEVONSHIRE (Death Vacancy).—Old-established Business; returns nearly £500 yearly; well-fitted shop and good stock; large house; full investigation; about £300 will be accepted.

14.—£850.—SEASIDE (South Coast).—Fashionable town; first-class Pharmacy; returns between £850 and £900 yearly; beautifully-fitted shop and laboratory, and good residence; card or reference will oblige.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country. particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the special attention of a London agent.

SPECIAL NOTICE.—TO PRINCIPALS AND ASSISTANTS.

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TO LET.

TO Chemists or Dispensary.—Bold corner, splendid position; immense traffic; rent £55. Davis & Thomas, 217 Pentonville Road, N.

TO be let, in a thriving town in North Wales, with immediate possession, a commodious House and Shop, now occupied by a Chemist; an exceptionally good situation and a splendid opening for an energetic man. Address, T. Jones 145 High Street, Bangor.

TO be let on Lease, Manufacturing premises near Tower, fitted at present as a flour-mill; floor area 10,000 ft.; good engine, two boilers and first-class artesian well; all machinery not required will be removed, the motive power reverting to lessee. Owner, Flint House, Leatherhead.

TO CHEMISTS.—To be let, at Brixton, in a good business neighbourhood, an excellent Shop with Dwelling House, in which a Chemist's Business has been carried on for some years; there is a side entrance, which facilitates sub-letting. Apply to Messrs. Herring, Son and Daw, 62 Coleman Street, E.C., and Brixton Hill, S.W.

TO Chemists, Druggists, Drysalter, Photographic Dealers, Druggists' Sundrymen, and others.—Retail and Wholesale commanding corner premises (unopposed); double-fronted shop, situated in South London; two minutes' walk from Waterloo terminus (Loop Line); immediate possession; lease granted; advertiser would take an interest in same. "Wimbledon," care of Messrs. Hodgkinsons & Co., 101 Upper Whitecross Street, E.O.

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ABOUT 40 gallons White Newfoundland Cod-liver Oil; price 2s. 9d. per gallon in Leeds; samples on application. Benjn. R. Vickers & Sons, Oil Importers, Leeds.

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WANTED, an Apprentice; good homo; Mixed Country business; light hours; moderate premium required; passed the Preliminary preferred. Bond Smith Brothers, Pottou.

APPRENTICE to a Pharmaceutical Chemist.—A situation is required for a well-educated youth where a thorough knowledge of the business can be learned; comfortable home; time for recreation and study, and permission to attend lectures; a moderate premium will be paid. Address, J. Silver, Hanwell House, Long Melford, Suffolk.

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YORKSHIRE.—£1,600 returns; net profit £500; price £1,000; stock can be reduced if desired; good country Retail, with Wines and Spirits; to an energetic man a sure fortune.**MIDLANDS.**—Unopposed light profitable Retail, returning £400; one-half net profit; good garden, well stocked with fruit-trees; low rent; price £250.**BIRMINGHAM.**—Prescribing and small Retail; returns £450; price £160 or valuation.**KENT.**—Dispensing, Retail, and Prescribing; no heavy trade; established a century; returns £700; price £450.**SURREY.**—Unopposed Retail; with personal attention will develop well; price £250; open to offer.**MESSRS. BERDOE & CO.**

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VALUATIONS and TRANSFERS conducted in any part of the United Kingdom. Twenty years' practical experience. Terms, which are strictly moderate, may be had on application.

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KENT.—Large town; Retail, Dispensing, and Prescribing; making £600 a year net profit; price £1,100; part can remain.**EASTERN COUNTY.**—Retail, Dispensing, and Agricultural Trade; returns £1,500; net profit £450; same hands 20 years; price £1,100.**DEVON.**—Market town; Retail and Dispensing; returns £615; same hands 20 years; good house and garden; valuation only.**KENT.**—Market town; Retail, Dispensing, and Prescribing; returns £850; net profit £350; good house; price £650, or offer.**MIDLANDS.**—Unopposed; Retail and Prescribing Trade; returns £400; net profit £170; low rent; good house and garden; price £250.**HOME COUNTY.**—Market town; Retail and Prescribing Trade; returns £300; has done £600, neglected through illness; price only £150.**WEST OF ENGLAND.**—Unopposed; Retail, Dispensing, and Prescribing; returns £650; rent £30; good house; price £380, or offer.**BUCKS.**—Market town; Retail and Dispensing Business; returns £800, increasing; good house; price £750; trial allowed.**MIDLANDS.**—Retail and Prescribing Trade; returns £750; net profit £300; good house and garden; price £500; trial allowed.**SOUTH-EAST COAST.**—Retail and Dispensing; returns £1,000, increasing; central position in popular resort; price £800.**LONDON.**—Main road; ready-money Retail and Prescribing Business, making a net profit of £600; owner retiring; price £1,000.**LONDON, N.**—Good-class Retail and Dispensing Business; returns £950; good house and garden; price £750, or offer.**LONDON, S.W.**—Retail, Dispensing, and Prescribing; returns £750 under management; net profit £300; good house; price £525.**LONDON, N.W.**—Good-class Retail and Dispensing; returns £700, increasing yearly; excellent position; good house; price £500.**LONDON, S.W.**—Retail and Dispensing Business; returns £400 under junior; P.O. pays rent; good house; price £250.**LONDON, N.**—Retail and Dispensing; returning £400 under assistant; good house and garden; valuation only, about £200.

Particulars of any of the above sent free on application.

Other Businesses, Town and Country, from £100 to £5,000.

Messrs. Berdoe & Co., 30 Jewry St., Aldgate, London, E.C.

BUSINESSES FOR DISPOSAL.

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FOR sale, an old established Chemist's Business in a very good position in Skipton, at a valuation of the stock and fixtures; rent £60; good house and shop. Apply W., care of Hirst, Brooke & Hirst, Leeds.**SOUTH LONDON.**—Chemist's and Druggist's Business for disposal; populous neighbourhood; good house and well-fitted shop; valuation of stock and fixtures only required; rent £70. Apply, in first place, R. Spencer, Cambridge Street, King's Cross, N.W.**FOR** immediate disposal, an old-established Retail Drug and Prescribing Business, in a Lancashire manufacturing town; good house attached; returns last year over £900; price £550. Address, "Opium," care of Messrs. Evans, Sons & Co., Liverpool.**CHEMIST AND DRUGGIST.** Retail and Manufacturing, doing over £1,800 per annum; special brands of goods, which are very profitable; capable of large development; for immediate sale, a bargain. Robert Dyas, Trade Valuer, 87 & 88 Fore Street, E.C.**MUST** sell at once, Small Dispensing Business; about £6 weekly till last few months (been neglected); handsomely fitted and stocked; price £150, half value of stock and fixtures; 10 roomed house and garden; rent £50. Apply W. W., 28 Tulse Hill. A dentist would do well.**Messrs. CROCKER & CO.**Trade Valuers, Transfer Agents, and Accountants,
15 WALBROOK, E.C.**EASTERN COUNTIES.**—An old-established Retail and Dispensing Business, in best part of market town; returns £650; price £150.**HOME COUNTY.**—Good class Dispensing Trade in best part of pretty market town; returns £600; price £550.**SURREY.**—Light Retail and Dispensing; returns £800; price £550; good house; handsome pharmacy; agency pays rent.**KENT.**—Good-class Family and Dispensing; returns £850; price £650; at a low rent; good house; worth attention.**MIDLANDS.**—Unopposed light profitable Retail, returning £400; one-half net profit; good garden, well stocked with fruit-trees; price £200.**YORKSHIRE.**—Family Dispensing and Prescribing trade, in suburbs of large town; returns £300; price £700; rent £40; good house.**ESSEX.**—Light Retail, Dispensing, and Prescribing trade; returns £720; price £675; rent £45; 11-roomed house and large garden.**LANCASHIRE.**—Good-class General Country Retail and Dispensing Business; in same hands many years; returns £1,300; rent low; price £700, or valuation terms can be arranged.**SUSSEX.**—Retail and Dispensing trade (no heavy); returns £500; price £450; good house; low rent.**LONDON, N.**—Good-class Dispensing Business; very handsome shop; returns about £800 yearly; very profitable; capital house, with yard and warehouse, held on long lease; price £750.**LONDON (Main Road), S.W.**—Retail and Dispensing, with good sale of own proprietaries; returns £1,400; price £850.**LONDON, N.**—Good-class Family Business, Retail and Dispensing; returns about £800 yearly; handsome shop and good stock; price £600.**SURREY.**—Death vacancy. Unopposed Retail and Dispensing trade; returns £350; rent £20; price £175.**SHROPSHIRE.**—First class Dispensing trade, giving a net profit of £300 a year; present hands 30 years; price £650.**CASHIRE.**—Old-established Country trade; returns £1,000; price, valuation only; large and convenient house; rent £40.**HANTS.**—Light Retail and Dispensing; returns £400, and increasing; large and convenient premises, held on long lease at a very low rental; price £200.**LONDON, N. (Main Road).**—Good-class Retail and Dispensing; returns £100 a year can be doubled with ordinary attention; price £220 to a quick buyer.**LONDON, S.E.**—Retail and Prescribing trade; unopposed position; returns £500; price £100; rent £40; good house, &c.**LONDON, S.E.**—Suburb—Retail and Dispensing; handsomely-fitted, double-fronted shop; returns £1,400; rent £50; price £1,000; or a Partner who would be entertained, with a view to present owner retiring.**LONDON, S.**—Good-class Retail and Dispensing trade; returns £500; low rent; price £350; capital position in marketing thoroughfare.**LONDON, N.**—Old-established Retail, Prescribing, and Dispensing; many years in same hands; returns £370; price £500.

NO CHARGE TO PURCHASERS.

VALUATIONS A SPECIALTY. TERMS ON APPLICATION.

BUSINESSES FOR DISPOSAL—Continued.**OLD-ESTABLISHED** Retail; Cash Drug trade; good position; large shop, capital house and premises; on lease; valuation only. Apply, Jas. Shilton, Walsall, Staffs.**LIGHT** Retail and Dispensing Business, situated S.W.; every investigation allowed and satisfactory reasons given for retiring; returns £320; price £230. Address, T. C., care of Messrs. Meggeson & Co., Miles Lane, Thames Street, E.C.**THIRTY** miles out.—Unopposed Retail and Dispensing Business 14 Surrey for immediate disposal; returns £600, full prices; net profit £250; convenient house, garden; satisfactory reasons for leaving; price £400 or offer. "Ipecac," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**FOR** disposal, a Mixed Business in Welsh colliery district of Mountain Ash; valuation of stock, &c.; 14 years' lease at low rent; proprietor engaged in another trade; wine and spirit licence's attached. For particulars apply to Whitty Evans, Licensed Chemists' Valuer and Auctioneer, Mountain Ash, South Wales.**IN** a market town in the South, a good-class Retail, Dispensing, and Agricultural Business, nothing heavy; returns £1,300; same hands many years; very convenient house, with large, well-stocked garden; price about £800; valuation terms could be arranged. S. K., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**LONDON**—£300 per annum net profit, and can be largely increased; General Retail, Dispensing, and Prescribing; about £800 required, and part can remain on easy terms; one month's introduction given; good stock, proprietaries, &c.; main thoroughfare. Apply, "Magister," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**£1,200.**—RETURNS close on £1,500 for the last 5 years at full prices; may be increased by personal attention; good class and general Mixed trade in a first-rate agricultural district; established upwards of 50 years; present hands many years. Apply, "Genuine," Harvey, 6 Giltspur Street, and Umney, 50 Southwark Street.**EXCEPTIONAL** opportunity.—First-class Dispensing and Retail; extremely profitable; same hands 30 years; best position; rent and taxes £30; excellent private house; garden, lawn tennis, &c.; average net profit, £270; proprietor, leaving district, will accept £600 from immediate purchaser; ample scope; sound investment. "Proprietor," 1 Bradford Street, Sbrewsbury.**£60** OR reasonable offer, for Corner Shop, opened as a Branch, in good working-class neighbourhood of Midland town; only been opened part of day for some time, and for family reasons owner wishes to sell; good Prescribing trade could be done at once by competent person; good fittings; lease; low rent. Address, "Spec," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BRANCH, under very indifferent and badly-neglected management; working neighbourhood, dense population; prettily fitted, well stocked; good house, exceptional low rent (£35), lease; a man to Prescribe and Extract could do well, and to a reliable one proprietor would sell for value of stock and fixtures, to be paid by instalments. 31 Cottenham Road, Holloway, N.

UNOPPOSED country Chemist's Business, with Wine and Spirit Agency for sale, as a going concern, by tender; owner leaving the retail trade; in same hands over six years; average returns for the six years £578; good opportunity; good house, private entrance, garden, warehouse, &c.; 60 miles from London; tenders received up to Thursday, May 12th; low reserve. Apply, A. B. O., Evans, Leseber & Webb, 60 Bartholomew Close, London.

BY PRIVATE TREATY.

FIRST-CLASS Dispensing and Retail Business in suburb of Liverpool, doing a genuine and increasing business at good prices; good shop and house (low rental), stock, and fixtures; returns £850 under manager; every investigation allowed; sole reason for disposal death of proprietor. For further particulars apply to Mr. J. P. McKenna, Solicitor, 7 Cook Street, Liverpool.

BUSINESSES WANTED.

WANTED, to purchase several good-class Dispensing and Retail Businesses, turning from £100 to £2,000. Messrs. T. P. Fuller & Co., Accountants, 41 Great Russell Street, Bloomsbury, London, W.C.

IMMEDIATELY, a reliable Retail and Dispensing Business, returning from £800 to £1,000, in a provincial town, within 100 miles of London; advertiser will pay cash down for a suitable concern, and is prepared to negotiate at once. Send full particulars, in confidence, to "Miner," care of Mr. Johnson, 4 St. George's Paved Row West, South Quay, Great Yarmouth.

PARTNERSHIPS.

WANTED, Partner, with £3,000 or £4,000 in old-established profitable Wholesale; principals only. "Gulheims," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PARTNERSHIP or Investment.—£1,500 will secure a half-share in a Manufacturing Patent-medicine Business, established upwards of 35 years, the senior partner wishing to retire from the firm; books open for strict investigation; the half-share would represent an income of £350 to £400 a year. Apply to "Alpha," 6 Hartington Street, Derby. No agents.

A CHEMIST in the country, doing £4 a week in an aerated tonic drink, wants Partners or Agents to extend same; worked on zoedoc lines; no capital or machine requisite (but desirable); the drink is so palatable and appetising commands forthwith a good sale; capable of indefinite extension; particulars sent to principals only; sample of essence for 1 doz., six stamps. "Zero," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SITUATIONS OPEN.

LAD wanted as Light Porter; strong and active. Apply to Vines & Frohm, 75 Aldersgate Street, City.

SURGEON'S Dispenser wanted; suit a Junior reading for exam.; salary 30s. per week. Apply, Mr. Sharp, 92 Osmaston Road, Derby.

SIX months or longer; Assistant requiring time for study; in Western suburb. Apply, "Study," 41 Third Avenue, Harrow Road, London, W.

WANTED, a Junior Assistant, Dispensing and General business; must know Welsh. Apply, D., Mr. John Thompson, 58 Hanover Street, Liverpool.

JUNIOR Assistant (indoors), accustomed to good Retail and Dispensing. Apply, stating age, height, experience, and references, to J. Williams, Victoria Road, Aldershot.

NATHANIEL SMITH & CO., Cheltenham, require a competent indoor Assistant. Applicants will kindly state full particulars as to experience, qualifications, age, &c.

WANTED, indoor Assistant for Mixed business. Apply, stating age, experience, salary, and reference from last situation, to J. Day, Chemist, Savile Town, Dewsbury.

WANTED, at once, active Junior, for Mixed Retail business; time allowed for study; abstainer preferred. State references and salary required (outdoors) to Melton, Chemist, Morley, Leeds.

A QUALIFIED Assistant wanted (indoors) in a Light Retail and Dispensing business. State experience, age, height, and salary required, W. E., 192 Uxbridge Road, Shepherd's Bush, London, W.

IMPROVER or Junior in Mixed good-class Country business, by middle of May; enclose photo, and state salary required, with references; assistance in study to intelligent improver. H. Oliver, West Malling.

TRAVELLER wanted, for town and suburbs; must have first-class connection; good salary and commission. Apply by letter, stating full particulars, to 189/32 Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PHARMACEUTICAL Chemist wanted by a Wholesale Manufacturing firm; one who has been accustomed to making pills will receive the preference; all communications will be treated as strictly private and confidential. Address, P. C. 201, Messrs. Deacon's, Leadenhall Street, E.C.

TEMPORARY, for few weeks during illness of Assistant; Mixed business. Cattle, Scarborough.

THOMPSON, Pharmaceutical Chemist, Putney, requires immediately smart Junior Assistant; also an Apprentice.

IMMEDIATELY, an Assistant (outdoors); aged about 25; good Dispenser and Counterman. Apply, enclosing photo, Rastrick & Son, Southsea.

DISPENSER (qualified), at once, good pay; short hours; no night, Sunday, or holiday duty. Apply, personally, Burrows, 243 Brompton Road, S.W.

JUNIOR Assistant (outdoors) with good Dispensing experience. Apply personally, or if by letter enclose photo, to J. H. Reid, 11 Buckingham Palace Road, S.W.

JUNIOR Assistant, accustomed to Dispensing; indoors. State age, salary required, previous experience, and references to J. Parrott, East Molesey, Surrey.

MINOR; indoors; to manage Branch; 1½ hour's Dispensing at local hospital; £50 and commission; good references; photo. Phillips & Worts, Ealing, W.

JUNIOR, indoors, about 22, for brisk cash business; liberal salary to suitable hand. Apply, stating full particulars, to J. H. Lewis, 22 and 24 Great Portland Street, W.

WANTED, competent indoor Assistant, for good Country business. State usual particulars, and enclose photo, to Phillips & Son, Pharmaceutical Chemists, Newport, Mon.

WANTED, immediately, an active Junior for a good General Country trade; a comfortable home and time allowed for study. "Chemist," 39 Silver Road, Gainsboro'.

AN Assistant (indoor), about 25; satisfactory references essential. Address, stating age, salary required, and enclosing photo (to be returned), to Butler, Chemist, Reading.

ASSISTANT (outdoors), with knowledge of Chemicals, Gums, &c., used in the Arts. Apply, stating age, experience, &c., F. W., Messrs. Laiss Bros., 4 Jewry Street, E.C.

WANTED, a good Assistant; those only need apply who have been accustomed to good-class business, and whose character will bear investigation. F. W. Doubleday, Dorking, Surrey.

WANTED, immediately, a steady, reliable Assistant, with Minor qualification, to manage a Branch. State salary required and experience to A. B., Messrs. Southall Bros. & Barclay, Birmingham.

OUTDOOR Assistant, for good-class Retail; must be a reliable Dispenser and smart Counterman; no Sunday duty. Apply, stating age, height, references, and enclose carte, to Hicks & Co., Cardiff.

WANTED, a competent Assistant; qualified; must be a quick and active Counterman. Send photo, and full particulars as to character, salary required, &c., to Fresson, 10 Tontine Square, Hailey.

AN Assistant in Light Dispensing business; two kept; Midland counties. Apply, with usual particulars, stating age, height, &c., "Homeo," Messrs. Epps & Co., Bishopsgate Street Within, London.

LIVERPOOL.—Qualified Assistant for small Drug Store; aged 22 to 25. State salary required, and usual particulars, enclosing photo (which will be returned), to W. M., care of 39 Pinhill Street, Liverpool.

JUNIOR wanted, at once; must be an active Counterman, obliging to customers; hours 8.30 to 9 p.m., no Sunday duty. Apply, with full particulars, stating salary (progressive) required, Lewis, Chemist, Preston.

IMMEDIATELY.—Junior Assistant, active and obliging; no Sunday duty; comfortable home. Particulars of previous experience, age, height, salary required, &c., and carte, to Smart, Pharmaceutical Chemist, Steyning, Sussex.

JUNIOR wanted about 20th May; must be able to Dispense; only one kept; no Sunday duty; salary £25; send age, height, and how long in the trade; name reference; enclose photo if convenient. C. F. Smart, High Street, Littlehampton.

WANTED, an Assistant for Mixed business; indoors; Minor qualification; aged 21 to 25. Apply, stating age, height, religion, salary required, and references, which must be unexceptionable, to J. B., 10 Albert Road, Widnes.

WANTED, qualified Assistant (Minor), indoors; accustomed to good-class country business; easy hours; comfortable home; salary £45 to £50, according to references. Apply at once, with full particulars, to A. H. Evans, Chemist, Dorchester.

IMMEDIATELY, energetic Assistant (outdoors) for pushing Retail business; must be a good Counterman, and thoroughly trustworthy; abstainer. To save time, please send full particulars to Robert Hall, Chemist, Middlesbrough, Yorkshire.

WANTED, energetic Man (married) to manage Branch; one used to a Mixed business and seeking permanency preferred; good house and garden, and gas supplied. Send references, age, height, salary required, and photo to J. F. Harston, Chemist, High Bridge, Lincoln.

WANTED immediately, a Junior Assistant; must be of good address, and well up in Dispensing and good-class Retail. Please state references, age, height, salary required, and enclose photo if convenient (to be returned), Dennis Greenwood, Chemist, 4 Petty Cury, Cambridge.

SUMATRA.—Resident Dispenser required immediately for Hospital in Sumatra; three years' agreement. Salary, 1st year, 80 dollars (Mexican) per month; 2nd year, 100 dollars; 3rd year, 120 dollars; passage-money to be refunded upon the completion of the term. The qualification of the Pharmaceutical Society is not essential, but the highest references as to character and sobriety will be required. Preference will be given to a young man. Apply, by letter, to G. H. B., c/o Ferris & Co., Union Street, Bristol.

WANTED, immediately, Junior Assistant outdoors, for brisk Retail. State age, experience, references, and salary required, to J. W. Cockcroft, Dispensing Chemist, Northgate, Huddersfield.

WANTED, active Junior (outdoors), about 18, for pushing Retail business; must be quick and reliable, and a good Counterman. Apply, stating age, height, experience, reference, and salary required, enclosing photo, to J. & J. Thompson & Co. (Limited), 192 Manchester Street, Oldham.

STEADY, persevering Manager for Country Agricultural Branch; furnished rooms; salary and commission; Prescriber and Extractor; suitable applicants giving full particulars will be answered followlag day, others are declined. Address, A. R. Walden, Chemist and Druggist, Ramsey, Isle of Man.

MANCHESTER.—Wright & Barnaby, Pharmaceutical Chemists, 223 Oxford Street, require an indoor Assistant about 24 years of age; must have had experience in a good Dispensing business; two assistants and an apprentice kept; state age, height, salary, when at liberty, and enclose carte. Apply to Mr. Barnaby.

WANTED, a competent Assistant by the middle of May; one with some experience of the Stationery trade and seeking a permanent situation preferred; if otherwise efficient he need not be qualified; no Sunday duty; churchman for choice, but not absolutely necessary. Full particulars to A. R. Awbrey, Henley-on-Thames.

TRAVELLER wanted, with connection amongst Chemists and Druggists on South Coast, to represent a large Druggist's Sundries and Patent Medicine house; will not be required to commence work till June or July. Apply by letter, stating age, previous employment, and full particulars, to "Sundries," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

GERMAN HOSPITAL, DALSTON.—The appointment of second Dispenser becoming vacant on June 21. Candidates are requested to send in their applications, and testimonials as to qualification and character, to the undersigned on or before Wednesday, the 20th inst.; the salary, besides board and lodging, commences at £30 per annum, and will be increased if the candidate appointed gives satisfaction. A. Walbaum, D.D., Hon. Secretary.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

LOCUM, Trinity Square, Llandudno; disengaged until May 23th.

AS Manager, Assistant, or Dispenser; undeniable references. 66 Edinburgh Road, Norwich.

TEMPORARY Manager, Senior; qualified. F., 4 East Terrace, Fairlawn Park, Sydenham.

IMMEDIATELY, as Junior or Improver; 4½ years' experience. Wellburn, Sandgate, Whitby.

TRAVELLER open for further commissions. Address, "Agent," 107 Leonard Road, Birmingham.

MANAGER; experienced; day or week; London; in May. "Chemist," 11 Radnor Place, Plymouth.

AS Manager or Assistant (outdoors); qualified; married. "Chemist," 21 Kay Road, Stockwell, S.W.

DISPENSER to Surgeon; experienced; good references. Vasey, Hilda's Cottages, Church Street, Whitby.

BRANCH Manager or Assistant (45); country preferred. "Pharmacist," 15 Wingate Road, Hammersmith.

TEMPORARY work by day; Assistant, or Branch; extract teeth; good references. M., 9 Ashburnham Road, Chelsea.

QUALIFIED, Locum-Tenens, or otherwise; first-class West-end experience, and again preferred. T. R., 7 Union Square, Boro'.

AS Junior; good experience; West-end preferred; disengaged. "Chemist," Amstel House, Fitzgerald Avenue, East Sheen.

BY qualified Chemist, situation as Manager, with view to purchase; good references. Apply, F. Miller, 192 Uxbridge Road, W.

SENIOR or Manager; aged 31; height 5 ft. 8½ in.; 16 years' good experience. "Minor," 12 Beaufort Street, Bramford Road, Ipswich.

LOCUM-TENENS or temporary Manager; qualified; steady and reliable; highest references; disengaged. "Extractor," 23 Florence Road, London, S.E.

BRANCH Manager or Assistant; disengaged; fully experienced; 35; 5 feet 8½ inches; single; abstainer; unqualified. "Statin," 12 Chapel Street, Uxbridge.

MANAGER or Traveller; Country Wholesale preferred; 20 years' experience; first-class reference; qualified. "Langholme," 5 Norfolk Street, King's Lynn.

DISPENSER, age 25, wishes evening engagement; used to Prescribing and Retail; highest references. Address, W. C., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BROAD.—Advertiser seeks engagement abroad; 9 years' experience in the East; experience in the soda-water trade also. Apply E. A. T., c/o Messrs. Balfour Brothers, 4 Jewry Street, Aldgate, London.

TRAVELLER, having a large connection throughout Ireland, Lancashire, Midlands, and South Coast, open to represent a good firm; first-class references. Address, T. M., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AS Branch Manager; married; age 32. M., 45 High Street, Brompton, Kent.

JUNIOR (21); London preferred. W., Ascot House, Mladley, Huddersfield.

JUNIOR Assistant; Wholesale or Retail; disengaged. W. Rushton, 3 Burton Street, Leicester.

ASSISTANT (23); abstainer; good references; experienced. O. U., 8 Canton Street, Southampton.

PART-TIME in London; good Dispenser and Tooth-extractor. R., 49 Susan's Road, Eastbourne.

JUNIOR, for two or three months; qualified; good references. "Alpha," 72 Archway Road, Highgate, N.

MANAGER; Dispenser; 23; married; disengaged. By letter, "Chemist," 19 Gough Street, Birmingham.

ASSISTANT; disengaged; aged 26; unqualified; good general experience. W., 11 Dorothy Road, Lavender Hill, S.W.

IMPROVER or Junior; 20; disengaged. State salary and particulars, "Radix," 50 Tillingham Street, Sparkbrook, Birmingham.

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numerous as they were last year, and there is an absence of mild cases, but wherever it has got a footing the afflicted persons have been gripped with much greater severity than was observed in 1890. The premonitory symptoms, such as pains in the limbs and lassitude, are not so well marked now; the patient simply takes a cold, which quickly settles in the throat, there is severe frontal headache in most cases, and the eyes are painful, the white pinky, and in the mornings the lashes stick together. Some are suddenly prostrated with unhearable pains. Cough is severe and somewhat spasmodic in character; it is more a throat cough than a bronchial one, and appears to be induced by the inflammation of the fauces. The cause of the disease does not appear to be so definite on this occasion as it was last year, and it is scarcely possible to fix the interval between the preliminary sneeze and the turning-point. Moreover, the feverishness fluctuates, recurring as the patient is careless, and it is only when it has left that the cough becomes so distressing. Without the most assiduous care bronchitis or pneumonia is apt to supervene when the more acute symptoms have abated, and it is those disorders which are making the present recrudescence of influenza so terribly fatal.

It will be gathered from the foregoing that the disease which doctors all over the country are now battling with is not precisely the same as the one with which chemists became so familiar a year ago. To that and the absence of anything like a newspaper scare is due the slight demand for ready remedies by the public. It will be remembered that the last epidemic began, as it were, on a low key, and after attaining a high pitch gradually toned down. The preliminary low key has been missed on the present occasion, and we are now at the high pitch, which only the medical men are able to reach. It is on the low notes that the public and the chemist come together. We may expect that that will take place now, and the trade had better be ready with ammoniated tincture of quinine and all the other remedies which ward off the disease. It will be useful to note some of the chief remedies.

What we may call a safe family mixture for all ages is the following:—

Tr. aconiti	5j.
Spt. ætheris nitrosi	5j.
Liq. ammon. acet.	3ij.
Glycerini	3j.
Aquæ ad	3viij.

M.

Dose.—For an adult a teaspoonful every quarter of an hour for the first four doses, then every half-hour for another four doses, thereafter every hour until free perspiration sets in. Doses of half a teaspoonful to young persons down to fourteen years, and for those from 4 to 14 put a dessert-spoonful in a wineglass of water, and give this in teaspoonful doses.

This is for the feverish stage. The patients should take to bed, heap on blankets, and have the room well warmed. Should the symptoms not abate in twenty-four hours the doctor should be called in, and under no circumstances should the patient leave the room for at least a day after the feverishness is gone. It is at this stage that bronchitis and pneumonia are caught. Nourishing broths, fish, and arrowroot are the best articles of diet. Quinine should be taken from the first, say two grains or more in half a glass of sherry at 12 and 4 o'clock.

There is no doubt that for cases in which pain, such as the shooting pains of rheumatism, is prominent, salicylates are highly beneficial. Twenty grains of sodium salicylate, or preferably diuretin, may be given every three hours. Diuretin (double salicylate of theobromine and sodium) does not affect the head so much as the plain salicylate. Salicin in 30-grain doses is equally good. Of preventives, quinine cannot be beaten. A teaspoonful of the ammoniated tinc-

turo three times a day is the most popular and probably the most nauseous form. A very good way of taking it is in plain soda water, but for this Mr. Lunan's modification of the tincture is preferable, as it mixes clear with the aerated water. The formula is:—

Carbonate of ammonia	323 grains
Sulphate of quinine	160 "
Distilled water	10 oz.
Rectified spirit	10 "

Dissolve the carbonate in the water, add the spirit and the quinine, shake until dissolved, and filter. Make up to a pint with distilled water.

A very good mixture was that prescribed last year by Dr. Rohson Roose. Is a reliable preventive:—

Quinine sulphatis	gr. xij.
Acid. hydrobromic. dil.	5iss.
Potass. bromidi	5iss.
Tr. aurantii	5ss.
Aquæ ad	3viij.

An eighth part twice a day.

We might go on indefinitely quoting formulæ, but they are all a playing on the same string. The aim which everyone has in view is to get the poison out of the system, and that is best done by diaphoretics and diuretics, taking care to maintain the strength meanwhile by the liberal administration of quinine and nourishing food.

For the cough plain remedies should be employed. Steam inhalations are excellent, but should only be taken at night. Ipecacuanha wine, alone on sugar, softens the mucus, and helps to bring it up. The cough is a dry one, and, strange to say, is greatly assisted by touching the tongue now and then with glycerine of horax, which also relieves the tight feeling at the throat. In the most severe cases a tannin-lozenge seldom fails to relieve the relaxed condition of the throat. Chlorate of potash tablets and all the other well-known simple remedies are likely to have a run, and this note may help our readers in their preparations. Sheffield gives them warning.

EXPLOSIVES IN 1890.

THE manufacture of explosives in this country appears to be a flourishing industry. According to the report for 1890, just published by the Chief Inspector of Explosives, Colonel Majendie, and Colonel Ford and Lieut.-Col. Cundill, his associate inspectors, there are now 123 licensed factories in the kingdom, exclusive of small firework and toy firework factories. This number is one more than that of last year, and no factory has been closed during the year. As evidence of the valuable results of efficient official inspection in such a manufacture as this, it may be stated that during the seven years immediately preceding the institution of this inspection by Act of Parliament in 1875, the average number of deaths which were known to have occurred in the manufacture, when far fewer people were employed, and much less dangerous explosives used, was 39.5. The average of the last ten years has been 8.1. During 1890 there were eight deaths, which all occurred at one of the old gunpowder factories—namely, at Roslin; so that among 123 factories there were 122 at which no fatal accident occurred. It is within recent years, it should be added, that the manufacture of explosives has taken such a wide development. The variety of gunpowders and of blasting-compounds is bewildering. A concise account of all these is published in the report in an appendix. No new ones have been authorised during the past year. The report gives particulars, among other prosecutions, of one against Mr. Herbert Crook, a chemist of Eastbourne, for the illegal manufacture and improper packing of some coloured fire. The defendant argued that the compound was not explosive, there being no gunpowder or

brimstone in the fire, and that it was not manufactured, the component parts being put into a jar and merely rolled. He said it was made of strontia nitrate, baryta nitrate, chlorate of potash (very small), and shellac. Two fines of 1s. each, and costs of 12s. 6d. in each case, were imposed.

In dealing with miscellaneous accidents which the inspectors have investigated, an explosion is mentioned which occurred on January 27, on the premises of Mr. Amos Ashworth, chemist and druggist, 70 Blackburn Road, Accrington. Mr. Ashworth put a gallon tin bottle containing about 3 quarts of methylated spirit and shellac into a pan of hot water on his kitchen fire; he eased the cork when he did so, and shortly afterwards the explosion occurred, the current passing through a middle room and blowing out a plate-glass window about 6 feet by 8 feet. The interior of the house was shaken, the ceiling slightly disarranged, and a door damaged. No personal injury was occasioned. In dealing with a somewhat similar case in 1887, the inspectors quoted from a letter from Mr. Boverton Redwood instances of former similar explosions, showing that there is no doubt whatever that explosions can and do occur with alcoholic liquids similar in all respects to those caused by petroleum spirit.

In January a man was killed at Polmadie (Renfrewshire) by the explosion of a cylinder containing compressed oxygen gas. It is stated that the cylinder had been previously tested up to 3,600 lbs. per square inch, whereas the pressure at which the oxygen was introduced was only 1,800 lbs. per square inch, and it is surmised that there must have been a weak place in the cylinder. The deceased was engaged in removing some cylinders when one exploded.

An explosion of a somewhat doubtful character occurred on February 19, at 1 Glengall Road, Old Kent Road, a private house occupied by Mr. Arthur Ross, boiler-composition manufacturer, in the course of some chemical experiments which Mr. Ross was carrying out, causing somewhat serious injury to the operator and slight injury to his wife. There were a considerable number of chemicals of sorts present, and it is uncertain what it was that actually exploded, but an examination of the residue led Dr. Dupré to the belief that it was probably some nitrate mixture of the nature of gunpowder, if not gunpowder itself.

Explosions of flour-dust have been frequently reported. This year an explosion of malt-dust at Reid's brewery, Clerkenwell Road, E.C., is recorded, which did damage to the room and injured one of the employés.

These few extracts from the report will show how closely the important but very risky industry dealt with is watched, and a study of the report itself will convince any one that the inspection authorised by the Explosive Acts is a well justified department of Government interference.

WHAT IS LINSEED MEAL?

OUR Glasgow correspondent quotes an expression of opinion from a magistrate there cautioning tradespeople against selling what he regards as the valueless ground cake, and tells them by so doing they may be brought under the notice of the authorities at any moment. The baillie is probably right, and since it seems to have become settled law that the Pharmacopœia is a final authority in regard to drugs which it names, it is quite possible that a court might hold that to sell as linseed meal anything but what is known as crushed linseed, would be an offence against the Sale of Food and Drugs Act. In the 1867 Pharmacopœia the ground cake was expressly ordered; in the 1885 issue "Lini Farina—Linseed Meal" is described as "Linseed reduced to powder." It is well known that the intention of the compilers of the Pharmacopœia was to make official as linseed

meal what was then known as crushed linseed. At that time the full legal effect of their definitions was not recognised or admitted. Squire says:—

Lini Farina of former Pharmacopœias was the cake of the linseed from which the oil had been pressed, reduced to powder; but B.P. 1885 applies the term to what has been known as crushed linseed. As there is a difference of opinion in the medical profession as to which of these is the best for making a poultice, it is unfortunate that the old term is now applied to something different. Both kinds might have been official under different names.

That this advice should be adopted is especially important in view of possible prosecutions. Our Glasgow correspondent tells us that the demand for the ground-cake kind is still considerable in that city, as it certainly is elsewhere. Under what name may it be legally sold? We should like to know.

It is still open to argument whether the definition in the Pharmacopœia is precise enough to limit the meaning of the term linseed meal to the crushed linseed of our shops. The meal, the oil, and the husk are certainly distinct parts of the linseed. How the oil can be reduced to powder we do not understand. Cocoa without its butter is, we believe, recognised to be the genuine powder of the *Theobroma Cacao*, and if so linseed meal or powder minus its oil ought to be the genuine powder of the *Linum usitatissimum*. However this may be, the remark of the Glasgow magistrate points to another article, the nomenclature of which must be carefully looked to when the next Pharmacopœia is under consideration.

PHARMACEUTICAL HIBERNATION.

IT is over now. April has gone, and those secretaries of provincial associations who have toiled during the winter to provide attractive programmes and keep members together can give one long sigh for the past. The session has been a peculiar one in some respects. Whether or not it was the census which we published in October last that has induced it, the fact has to be recorded that several new organisations have sprung into existence. They are not highly important ones, and have not been particularly energetic, but they exist, and that is a satisfactory feature. Even more satisfactory is the circumstance that two or three old associations which had long lain dormant have shown signs of vitality. It was the Pharmacy Bill, now before Parliament, which thrilled them into a passing activity. Mr. Carteighe and the Bill were the feature of the winter. Without the energetic and fluent President the Bill meant little or nothing to the chemists of the country. With him it meant a host of meetings, formal resolutions, airing of grievances, and little dinners—all breaking the monotony of the life pharmaceutical. Associations have been very useful to the Pharmaceutical President in getting up the Pharmacy Bill meetings during the past winter, and that work will stand as their principal event. From the political and social point of view, we may fairly say that the winter's work of the various associations throughout the country has been satisfactory.

When we speak of the country, we do not forget that Wales is out of it, so far as pharmaceutical organisation is concerned. Ireland has its Pharmaceutical Society and Chemists' and Druggists' Associations; but none ventures into paper-meetings, and only the younger bodies in Ireland indulge in tea and song. The country is reduced, therefore, to England and Scotland, but we prefer to take it in two parts, with a dividing line between the Tyne and the Mersey. It is surprising how activity centres in the northern section. At Liverpool, Newcastle, Manchester,

and the principal Scotch towns there are healthy organisations. South of the line they seem to live a hand-to-mouth existence. The Pharmaceutical Society has its abode in this part, and here is its strength concentrated. The Society has had five evening meetings in the course of the winter. With its 1,500 odd pharmaceutical-chemist members, it might be expected that these meetings would be glutted with communications. As a matter of fact, only three members of the Society have read papers before the meetings; the Research Laboratory produced two papers; the curator two; a Glasgow professor and an Australian a paper each—altogether nine. The subjects are interesting in one sense. They are:—Salicylic acid, eucalyptus honey, eucalyptus manna, chaumugra oil, pharmaceutical nomenclature, *Phlox Carolina*, African arrow-poison, and citronella oil. We do not attempt to estimate the extent to which pharmacy has been enriched by these contributions. The fact that meetings have of late been possible only through the exertions of Mr. Holmes, the Society's curator, may account for so much attention being given to pharmacognosy; but there is something besides that in pharmacy, something more attractive, and the Evening Meetings Committee fail in their duty by not getting full advantage of the Society's talent. Elsewhere the "Additions" to the British Pharmacopoeia has furnished suitable matter for several interesting evenings. This has been the case at Birmingham, Liverpool, Newcastle, and Edinburgh. The North British Branch meetings have, as usual, been practical, if "scrappy." The winter has been essentially one of small things, or "short papers," as the junior associations call them. This is not a bad feature by any means; it is appropriate to busy men, who have their businesses to attend to, and who cannot pretend to undertake those prolonged and intricate researches which are the peculiar province of the Bloomsbury Research Laboratory. The strength of provincial associations will always lie in anything that promotes friendly intercourse between the chemists of a district, and since trade journalism provides a means of prompt publication of new ideas and processes (we have, by the way, published during the winter as many original papers as would keep half-a-dozen associations going), the direction in which most good can be done is by social evenings and impromptu discussions on current trade topics. Tact on the part of the chairman often succeeds where the usual elaborate machinery fails to awake interest.

There are now ten junior associations throughout the country—seven in the northern part and three in the south. The fact that Scotland alone has five assistants' and apprentices' associations points to one advantage which the outdoor system has over the indoor, still almost universal in England. In the North of England the outdoor system is also not uncommon, and to this is due, in some measure, the vitality of the Liverpool and Newcastle Associations. So long as the indoor system prevails, we cannot expect much progress in this direction in the south. Even the premier association in London, with its large revenue from members and subsidies from subscribers, is almost a failure as a working organisation. Only its social evenings are a success as to attendance, and although the meetings are most interesting and useful when the members rely upon themselves, outside aid is the rule. Essays have been abundant enough at Great Russell Street this past winter, and good men their authors; but there is little of a lasting character about the work as a whole. The Brighton boys seem to be taking things earnestly in their young career; Glasgow juniors have had a little too much of the essay element about their meetings; Edinburgh continues in the old plan of fostering experiment and observation amongst the members of the association there; and other associations appear to have had average

sessions. A contrast between the junior and senior associations is altogether in favour of the former. And this measures the value of the work of the winter. There is a want of character about it, nothing to be proud of, and little to make this country take rank before others in Europe. Our reputation for original pharmaceutical work seems now to rest solely on the work of the British Pharmaceutical Conference. It has far outstripped the Pharmaceutical Society in fostering research by members of the trade, and it does this at a great disadvantage. There is no reason why the Society should not, without rivalry, do what the Conference is doing, and for its own reputation it should make an endeavour to place itself above comparison with local organisations.

COMMENTARY.

THE EXAMINATIONS.—Rarely has there been such a rush of aspirants for pharmaceutical qualifications as there was in April. The Board of Examiners sat in London for ten days, examining in that time 313 candidates. Twenty-three of these were for the Major and 14 passed; of 288 Minor candidates 124 passed, and one gentleman passed the modified examination. The Scotch Board has also had a heavy month, sitting seven days, but the results were not received up to the time of our going to press.

THE ARTIFICIAL QUININE.—In *Nature's* report of the meeting of the Paris Academy of Sciences, at which Grimaux and Arnaud read their paper on "The Formation of Cupreine into Quinine," it is stated that the plan which these chemists adopted was to heat to 100° C. in sealed tubes, for twelve hours, a mixture of molecular proportions of cupreine and methyl chloride with an atomic proportion of sodium (the whole dissolved in methyl alcohol). They deduce from experimental evidence that quinine is the methoxide of cupreine. It would thus appear that they only differ from Hesse in using metallic sodium instead of caustic soda.

SILENCE FOR THE NIZAM.—"Ever since that ill-fated report of the Hyderabad Chloroform Commission inspired us with the hope that these catastrophes might be avoided, deaths from this cause have been oppressively numerous." This extract is from a note in the *Medical Press* on "The Heart in Chloroform Narcosis." It seems to us we have said much the same thing on several occasions, though we were not fortunate enough to hit on the word "narcosis." We should like to hear from the other side now. The Nizam got a large amount of glory for his thousand guineas, and an English physiologist got glory and the thousand guineas. Surely it is time one of them defended the report and the theories which were so confidently put forward less than two years ago.

THE PROPOSED ÆSCULAPIAN LODGE OF FREEMASONS.—The correspondence columns of last week's *Lancet* contain the following paragraph, which will doubtless be read with amusement by pharmaceutical freemasons:—"Dr. Thomas Dutton (P.M.) asks us to state that the above lodge has not been abandoned; but that, on the contrary, the petition will be presented to the Grand Lodge next month, praying for a warrant, and he adds that any medical Mason desirous of becoming a founder may have full particulars by applying to him. An impression appears to prevail that the Galen Lodge (chemists and druggists), which recently obtained a warrant, has taken the place of the Æsculapian Lodge. The report it is surmised, originated from the fact that the first W. Master of the Galen Lodge was a medical man." The W. Master referred to is Dr. B. H. Paul, who will be as astonished as we are to hear that he is "a medical man."

SIR HENRY ROSCOE, M.P.—Part 20 of Cassell's Cabinet Portrait Gallery contains a life-like and characteristic permanent photograph portrait of Sir Henry Roscoe, together with a glowing account of his scientific labours. His parliamentary achievements are more vaguely alluded to. In Pharmacy Bills, at any rate, Sir Henry has not yet been strikingly successful. Mr. Sexton could give him any number of points in this direction. Sir Henry Roscoe is in his 58th year. A good remark is made in the course of the biography published by Messrs. Cassell. After mentioning that the subject of it studied science at Heidelberg, the writer remarks that "a working knowledge of the German language is absolutely essential to the modern chemistry specialist, who cannot wait for the translation of important German researches. Indeed, most of them are never translated, but slowly assimilated into English text-books." Rather severe on the authors of English text-books. The portraits accompanying Sir Henry Roscoe's in this part of the Cabinet Portrait Gallery are of Mr. and Mrs. Henschel, the musician and singer. The price is 1s.

UNITED STATES PHARMACOPOEIA.—At a recent meeting of the Philadelphia College of Pharmacy Mr. W. McIntyre, replying to an inquiry as to what extent physicians use the Pharmacopœia, showed that in 1,000 consecutive prescriptions written by 78 physicians in Philadelphia, 386 different drugs or preparations were ordered; the total number of items in these prescriptions being 3,393, or on an average a trifle over $3\frac{1}{3}$ items for each prescription. Of the drugs ordered, there were 275, or 71.24 per cent. of the total number, recognised by the U.S.P.; 76, or 19.69 per cent. of the whole, published in the National Formulary, the *American Journal of Pharmacy*, or other readily accessible publications; and only 35, or 9.07 per cent. of the total number, consisted of proprietary, trade-marked and similar preparations. This result was considered by the meeting to be highly satisfactory. It may be taken to represent the condition of things in the New England States. We may note that in the analysis which we made five years ago, in 13,000 prescriptions proprietary articles occurred only 700 times, which is much below the American number.

VETERINARY COUNTER PRACTICE.—The Berlin *Pharmaceutische Zeitung* in an appreciative review states:—"This English guide to veterinary treatment is written for the purpose of enabling the apotheker, who is always placed at a disadvantage in comparison with the dispensing veterinary practitioner, to hand to his customers suitable medicaments for animals upon their description of the symptoms, and without himself inspecting the animal. In England such a book is probably one which is urgently required, and in Germany that is also the case. In many parts of the country it is exceedingly difficult to place oneself in reach of a reliable veterinary practitioner. His fees are often exceedingly onerous, and for these reasons the apotheker is frequently in a position to render assistance in a field in which he could only have gained any experience by accident. These reasons have prompted the publishers of THE CHEMIST AND DRUGGIST to produce a book comprising, in a manner easily understood and carefully arranged, prescriptions and hints as to the treatment of the most common diseases of animals. The book is written by well-known and experienced veterinary practitioners, and numerous illustrations serve to assist the reader in obtaining a knowledge of the diseases treated of." After enumerating the several chapters into which the book is divided, the reviewer mentions that a German edition of the work is in contemplation.

THE ACIDS OF OPIUM.—Mr. Alfred Dohme, Ph.D., at the suggestion of his "esteemed instructor," Professor Flückiger,

has been studying the relative quantities of the chief constituents of opium in order to see how these are combined in nature. Flückiger's idea was that there is in all probability enough sulphuric acid in opium to combine with nearly all the alkaloids present; but whether or not it is sulphuric or meconic acid that is in excess and hence free, as yet remained an open question, says Mr. Dohme in his report in the *American Journal of Pharmacy*. We are not altogether sure that it is an open question, Mr. D. B. Dott having gone thoroughly into the matter a few years ago, of which fact Mr. Dohme appears to be unaware. The conclusions which he now arrives at are:—(1) That the free acid in aqueous opium extracts is meconic acid; (2) that the silica in opium is present in the form of sand, and that the lime is most likely combined with phosphoric acid, while the magnesia and potash are probably combined with organic acids and some sulphuric acid; (3) that there is more than enough sulphuric acid present in opium to combine with all of the alkaloids present save narcotine; and (4) hence morphine, narceine, codeine, &c., are contained in opium combined with sulphuric acid as sulphates, while narcotine, at best only a feeble base, is combined in part, at least, with meconic acid, of which there is also some present uncombined in the drug.

CHEMICAL ROGUERY.—A curious chemical exhibition was given at the North London Police Court last week. An assault case had arisen out of the following circumstance:—A man named Gorman went to a betting man named Farnall, with a piece of paper on which was written "Florence St. John," at the same time handing him a sovereign. Gorman said he had come from a Mr. Coleman, who lived close by. This seems to be the way people bet in North London. Farnall took the paper and the money, and then noticed that the paper was damp, but was drying. He also perceived that the name "Florence St. John" was fading from the paper, and that "Far Niente" was appearing in its place. "Far Niente" was the name of a horse which had won a race at Bath nearly two hours previously. Gorman called the next day and asked for 5*l.* 10*s.*, which he claimed to have won on Far Niente. There was a dispute, some kicks, and a policeman called in. The paper above mentioned was tested in the court, and found to work out as described. When wetted it showed "Florence St. John," but when dry showed "Far Niente." It was said at the station a bottle of chemical matter was found upon Gorman. Gorman was fined 3*l.* for the assault, and the magistrate recommended the prosecutor to take action for the attempted fraud. If this should meet Mr. Gorman's eye, perhaps he will give us particulars of his magic inks. We know an invisible ink which will become apparent on heating, and we know how to make writing visible by damping it with a proper solution; but we confess we do not know how to carry out the experiment so glibly described in the foregoing report.

AT THE COUNTER.

MESSENGER: "Please, sir, Mr. — would be glad if you would send him a lady's syringe—one of the newest kind. I think he called it an enigma!"

A DALSTON CHEMIST contributes the following orders to this column:—"1 penniworth sirline powder," "penny of baby's coff. stuff," "1*l.* bold harmoniums," bottle of "daffodil-dock," "callamall pooder," "box of permerchty ointment."

THE following came from Newcastle:—"Red septar in a box," "exasperated balls," "odicoelone," "critic magnesia," "aniseed chronicle," "anti Billies Pills."

THE IRISH PHARMACEUTICAL EXAMINATION.

A CANDIDATE'S EXPERIENCE.

IN response to a writ of *habeas corpus* bearing the signature of Mr. A. T. Ferrall, Registrar of the Pharmaceutical Society of Ireland, I took advantage of the Easter excursions, and made my first trip to Dublin (I passed the Preliminary elsewhere), and at 10.45 A.M. on last All Fools' Day I found myself, with five other embryo pharmacists, within the portals of 11 Harcourt Street, awaiting tremulously the course of events, which we all hoped would be crowned with mutual success.

We had just got comfortably seated a few minutes, when the examiner for the day came in, Dr. Ninian Falkiner—a gentleman whom we all considered very courteous, and who, during the entire examination in chemistry, treated all the candidates very fairly.

His first move was to hand each one two papers, one on "General Chemistry," as follows:—

1. Define the following terms:—Element, Non-metal, Metal, Acid, Salt.

2. I require 1 gramme of carbon dioxide. What weight of CaCO_3 must I take to obtain it?

3. What is the formula for benzine? and what relation has it to phenol (carbolic acid)?

Two of these questions to be answered.

The other paper was on "Pharmaceutical Chemistry":—

1. How may hydrocyanic acid be prepared? Give formula. What are the principal chemical reactions of this acid? How may it be standardised?

2. Trace the chemical changes that occur in the formation of tartar emetic from antimony glance.

3. What impurities are to be observed in: *Syr. ferri phosphatis*; *potassii iodid.*; *acidum phosphoricum*; *extractum belladonnæ*? How may they be detected?

4. What chemical changes occur during the manufacture of chloroform?

Three of these questions were to be answered.

After the papers we had an interval for lunch. On resuming we were started at analytical work in the laboratory, which brought out the real talent of the candidates. The following were our directions, accompanied with two bottles and a box containing a white powder:—

1. Analyse the salt in box No. 1.

2. Bottle No. 2 contains an impure sample of lemon-juice. Detect the adulteration.

3. What weight per ounce of As_2O_3 does bottle No. 3 contain?

I found the powder insoluble in water, but soluble with effervescence in hydrochloric acid, and imagined at first that it was one of the heavy magnesias; but, as I brought it down in the fourth group, I tried and found it to be calcium, and as, practically, the acid had been demonstrated already, I returned it as calcium carbonate (precipitated chalk).

No. 2 was then started on, and after very little trouble I found, with the aid of HCl and BaCl_2 , that the delinquent here was sulphuric acid, with which it was pretty freely adulterated.

The next work was a quantitative estimation. The form of the question was rather unusual. Generally it is the percentage that is required. I took 50 grain-measures of the solution of arsenic, and, after boiling with soda to neutralise, and adding a little starch as an indicator, I tested with the volumetric solution of iodine; then, by a sum in simple proportion, got the percentage; then, by another sum in proportion, got the quantity per ounce, as required by the question. Of course I could have taken the whole ounce at once in the first calculation; but it never struck me to do that at the time.

After this practical work was over, Dr. Falkiner took us separately in the "*viva-voce*." The questions, as far as I remember them, ran somewhat as follows:—

What are the formulae and modes of preparation of sulphuric ether, chloroform, ammon. hydrochlor.? Mention some of the chlorides. How many chlorides of mercury? Give their formulae, and their usual names, and how you would distinguish them. What are the tests for strychnine, quinine, &c.? and a number of questions of this ilk.

We finished on the first day about 6 P.M., and were told by the Registrar to turn up at eleven o'clock next morning.

SECOND DAY.

Punctually at this hour we were on the carpet and chewing the end of a lead-pencil, when Dr. John Evans made his appearance; he also gave us a paper first to ruminate over, as follows, on *materia medica* and B.P. preparations:—

1. Write the formula for every pill-mass and compound powder containing opium. Give ingredients, strength, and dose.

2. What is *felix mas*? State how its preparation is made, with dose of same. Write a formula for a draught containing it.

3. State accurately how the infusions of *digitalis* and *ergot* are prepared, with strength and dose of each.

4. Enumerate liquors of the British Pharmacopoeia containing alkaloids or their salts. State accurately the mode of preparing same, and give strength and dose.

5. Give the dose of nitrate of silver, arseniate of iron, nitrite of amyl, nitrate of pilocarpine, phosphate of soda, oxide of zinc, sulphate of magnesia, valerianate of zinc, sulphate of beherine, elaterium, liquor calcis.

This was nothing that anyone should be afraid of if he knew the "*Epistle to the Pharmacians*," or Squire's commentary on the same, anyway decently. While the process of writing the paper was going on, Dr. Evans called up one after another of the candidates to go through the *viva-voce* mill, and, I assure you, everyone's knowledge was pretty well tested. There was no escaping his searching questions; and I now almost forget the subject-matter of everything I was asked. He first showed me a nicely-bound volume, which proved to be an album containing some of the most terrible specimens of penmanship in the form of prescriptions I have ever seen. If a 2-oz. glass-syringe had been filled with ink and squirted over a sheet of clean notepaper at about six or eight yards' distance, the cacography produced, to my mind, would have been as intelligible in the one case as the other. After patient and painful work, I believe I satisfied the doctor in reading to him in full Latin both the medicine itself and the quantities ordered, and the translation of the same into English. I was next shown a number of samples to recognise, among which I remember Plummer's pill, rhubarb pill, gum ammoniacum, cetaceum, paraffinum durum, ol. theobromæ, sapo durus. Asked the full process for making *mistura ammoniaci*, its appearance and colour; what is an emulsion; how would I dispense oil of turpentine in a mixture; what spermaceti was got from; composition of Dover's powder; what was an alkaloid; how was liquor arsenicalis prepared, its composition, why it was coloured. Shown gamboge, balsam of tolu, menthol, sapo animalis, poppy capsules; asked what menthol was, and how obtained; the difference of composition between saporum and sapo animalis; what preparation cap. papav. entered into; how many syrups of poppies there were; strength of tincture of opium, &c. Then a good run through the Poisons Act. After the papers were lifted, we adjourned for dinner, and, on resuming, were each handed a prescription to dispense; mine was as follows:—

Emp. belladonnæ hujus forma (a circle 1 inch diameter)

Sodæ bicarb.	..	..	..	..	..	—
Liq. strych.	..	..	..	..	..	3ss.
Syr. zingib.	..	..	..	..	..	3ss.
Aquæ, ad	..	..	..	..	..	3viij.

M.

Sig.: *Cochl. mag. ij. ter in die c. coch. mag. j. succ. limonis.*

Succus limonis —

It will be observed there is no quantity mentioned of sodæ bicarb. or succus limonis. The prescriber presumes you know how much alkali will be required to neutralise the lemon juice; but, as there was no lemon juice there I had to make a substitute extemporaneously with citric acid. After I got the prescription from the examiner and read it, I drew his attention to the liquor strychnæ in the mixture, and hinted to him that he made a mistake in putting it there. I was rather surprised when he told me he had put it there purposely to see if I would dispense it without drawing his attention to its incompatibility. I finished, capped and labelled the bottles, putting on my own name on the labels, as if I were the patient. I then started to spread the plaster,

and turned it out fairly. In this part of the examination I think candidates should be allowed more time, as half an hour (the time given) is really too little considering that I, like the others, spent a long time looking for the different ingredients. Thus ended our second day, at about 5.15 o'clock.

THIRD DAY.

On this our last day, Dr. R. J. Montgomery officiated as judge and jury. He too was very considerate to everyone, holding the scales between us and the Society very evenly. We started the programme, as before, with a paper divided into two parts.

PART I.—MATERIA MEDICA.

1. Name and describe briefly the B.P. seeds from which official alkaloids are obtained.
2. *Echallii fructus*.—State the official products, with definitions, characters, and doses.
3. *Menthol*.—Give the P.B. definition, characters, and dose.
4. *Hirudo*.—Name and describe the P.B. varieties.
5. What is *santonin*?—State its source, characters, and tests.

Three questions to be answered.

PART II.—BOTANY.

- (1.) Give the characters which distinguish *aconitum* from other *ranunculaceæ*, and describe its flowers.
- (2.) State the chief characteristics of the pine family.
- (3.) Describe in correct botanical terms cherry-laurel and foxglove leaves.

Two of these to be answered.

While the papers were in progress the examiner took us separately for the *vivâ-voce* on *materia medica* (of course we returned to the papers when he had done his oral with us), and after he had called up all the candidates, and the time for collecting the papers was up, we adjourned for dinner, and then, on resuming, we started the *vivâ-voce* botany. This was the only subject I dreaded, and I am afraid my answers in this part of the proceedings would not have justified the examiner in passing me if I had not pulled up my marks in the forenoon by a really splendid paper on the same subject.

Both Dr. Falkner and Dr. Montgomery are comparatively new examiners; this, I understand, was the second examination they had conducted in connection with the Pharmaceutical Society. Dr. Evans has been examining in pharmacy, &c., for a long time, and I daresay he has seen some very peculiar-shaped pills, blisters, plasters, &c., turned out in the compounding department of 11 Harcourt Street.

Thus ended successfully, at 4.15 P.M. on April 3, 1891, my experience of the examinations of the Pharmaceutical Society of Ireland.

PHARMACY OF THE WORLD.

BRITISH GUIANA.

EVENTS which have occurred recently in the pharmacy of this colony make it appropriate that we should resume these articles with some account of British Guiana and the drug trade therein. This is the *El Dorado* of the old explorers, and it is a country as interesting to the pharmacognocist as any other on the globe. Nature intended it to be a section of the north-east corner of South America; but three of the largest rivers of that great continent make it an island.

"A miserably disgusting mud flat is British Guiana," writes an English pharmacist there, "the monotony of which is only relieved by the weekly arrival of THE CHEMIST AND DRUGGIST"—which may be flattering to us, but is scarcely accurate when we remember that there is at least one 8,000-foot mountain in the colony, and a little more push would take the colonists into hilly districts.

British Guiana consists of three provinces—Demerara, Essequibo, and Berbice. It has an area of about 100,000 square miles, but a mere fraction of that—viz., 130—is under cultivation. The capital of the country is Georgetown, a

town on the Demerara river, having a population of about 50,000. New Amsterdam is the town next in importance. The inhabitants of the colony—106,000, or thereabouts—are mostly coloured people—West Indians, East Indians, Chinese, and the like—the whites constituting less than 10 per cent. of the whole. The justification of our correspondent's description of British Guiana as "a mud flat" lies in the fact that the lands along the coast and river-banks are a rich alluvial deposit, composed of strata of surface-soil, fine sand, decayed vegetable matter, and clay, lying below high-water mark, so that plantations have to be protected from the sea by dykes, as in Holland. The land is also drained by canals. This description holds good up to 20 miles from the coast, when the country begins to take a more hilly aspect. The remarkable mountain, Roraima, which was ascended for the first time by a European a few years ago, is situated 200 miles from Georgetown, on the borders of the colony.

The principal industry of British Guiana is the cultivation of the sugar-cane and the manufactures incidental to it. The colony has an exceedingly rich and interesting flora, and many valuable medicinal products are obtained from it. Gutta-percha and balata are not unimportant parts of the exports, which amounted to about 2,590,000*l.* in 1889. A railway connects Georgetown with Mahaica, on the east coast, which is proposed to be extended; but until the interior of the country has been opened up waterway carriage will, as at present, be chiefly employed.

The climate of the colony is more temperate than that of some countries under similar parallels (lat. 1°–9° N., long. 57°–61° W.). There is a wet season from April to August, and another in December and January. For Europeans the country cannot be said to be healthy; but it is possible that the country's apparent richness in gold-deposits, and probably diamonds, may attract many who do not see wealth in sugar and gutta-percha. At present British Guiana is prosperous, and on the upward move.

As to pharmacy in the colony, we are indebted to Mr. Tom Kittow, a chemist and druggist of Great Britain, and dispenser at the public hospital, Berbice, for general information; and also to Mr. John Brown (Jos. Klien & Co., Demerara), honorary secretary of the Chemists and Druggists' Association of British Guiana, for information regarding the operations of that association.

There is no pharmacy law in the country, and the sale of poisons is unrestricted, anyone who can pay the annual tax of \$48 (10*l.*) being eligible to keep open shop. But it should be stated that the Medical Board has power to examine candidates for the certificate of dispenser. This examination is of an elementary character, and is mainly taken advantage of by Creoles, who fill the posts of dispensers on sugar-estates. As a rule, the proprietors of sugar-estates keep their own dispensers, paying salaries of \$20 to \$40 per month, without board. These situations are chiefly sought for by Creoles, who find a difficulty in getting such employment if they have not been examined and passed by the Medical Board. British and Irish qualifications are, of course, appreciated in the larger towns, where the holders of them are to be found, but at present there is no compulsion regarding them. We shall refer to this matter later in speaking of the Chemists and Druggists' Association.

Apart from shops owned by native-horn pharmacists holding the certificate of the Medical Board, or other qualification, there are in British Guiana a number of first-class pharmacies in which English and Scotch assistants are employed. Some of these businesses are valuable, as may be judged from the fact that one changed hands two years ago for \$20,000, this not including the book-debts of the firm. As only those doctors in a remote part of the country do their own dispensing, there is a good deal of business done by the chemists and druggists in that department, and the best of it is that the prescriptions are kept by the chemists and druggists, no copies being given. The British Pharmacopœia is the recognised standard for all medicines, and very little is done in specialties and patent medicines. In regard to prices, it should be noted that the duty on imports is 7 per cent. *ad valorem*, so that 1*s.* 4*d.* for 1*s.* 1½*d.* patents, and toilet articles at 25 per cent. above the advertised rates, are not extravagant, although remunerative rates, all things considered. The dispensing charges are very fair indeed—e.g., 3*vj.* mixtures, 3*s.* or thereabouts.

Retail prices of drugs are moderate—thus, tinctures are 4*l.* to 6*l.* per oz.

Nearly all supplies are drawn from London and New York houses, a few articles coming from France, with which there is regular communication by steamer. We asked Mr. Kittow "if English houses make any attempt to do business with native houses," and to that he replies, "Oh dear, yes! More enterprising in this quarter of the globe than the Yankees. Good London houses, such as Hodgkinson-Treacher's and Burgoyne's, carry the sway."

In October, 1884, the chemists and druggists of the colony resolved to found an association for their mutual protection, and for the advancement of pharmaceutical education in the colony. The association, after 1885, lay dormant until early in 1890, when, through the energy of Mr. Van Nooten, a meeting was called on February 12, 1890, whereat it was resolved to ask the Governor for an ordinance of incorporation, which was granted in August last. This ordinance sets forth that the objects for which the association is incorporated are:—

1. The advancement of chemistry and pharmacy in this colony.
2. The promotion of the education of persons who intend to practise chemistry and pharmacy.
3. The consideration of all questions connected with the trade of chemists and druggists, and the promotion and protection of such trade.
4. The promotion of or opposition to legislative and other measures affecting such trade.
5. The provision of a fund for the relief of distressed members of the association and of the widows and orphans of members.
6. The undertaking, when moved thereto by the parties concerned, but not otherwise, the settlement by arbitration of disputes arising out of the trade dealings and relations of chemists and druggists; and
7. The doing all such other things as are incidental or conducive to the attainment of the above-mentioned objects or any of them.

The association consists of members and associates. Members residing in Georgetown and New Amsterdam pay \$5 a year, and those in the country \$3; and are elected from those in business on their own account, who pass an examination in chemistry, materia medica, pharmacy, and reading and dispensing prescriptions. Fee, \$5. Assistants may become associates on passing an examination in the primary rules of Latin grammar, arithmetic, and a fair knowledge of the drugs and poisons in common use. Fee for examination, \$3, and \$3 annually.

The council has the power to admit as members or associates such persons as possess certificates or diplomas from any school of pharmacy or other body.

The present office-bearers of the association are: President, Mr. E. G. H. Van Nooten; secretary, Mr. J. Brown; treasurer, Mr. J. Virtue. Council: Messrs. Rodway, Rainer, Fonseca, Jordan, Max, and Pontifex. At present the association consists of 83 members and 30 associates, amongst whom THE CHEMIST AND DRUGGIST is regularly circulated by the council of the association. At the annual meeting in January last the president made some pertinent remarks in regard to the encroachments made upon the trade by "cutters." In the course of his address he said: "The encroachments made on our business by incompetent persons and stores are now such that, unless we are up and fighting for our privileges, they will slip away from us entirely. If we do not fight our own battles, no one else will do so for us. The longer we delay in taking united action, the stronger our opponents will become; and, once they get a footing, our chances of success become smaller and smaller. Most of you know how much the action of the stores in England and Scotland has told against the legitimate druggists and dispensing chemists there. The same thing is coming to our own doors—nay, is here already. Already is the thin end of the wedge inserted; it rests with us, as a united body, to stop its going farther. This fact alone shows clearly the good and need of such an association as ours."

A discussion followed in regard to the need of a Pharmacy Act, and, as at the quarterly meeting, held on April 6, the president reported that the committee appointed at the

annual meeting in January were engaged in preparing a scheme for a "Pharmacy and Poison Bill," which the Council hoped would, when completed, meet the approval of the Government. There is some difficulty, naturally, in getting a scheme which will not interfere with the rights of the Medical Board, which grants dispensers' certificates; but this, it is hoped, will be satisfactorily adjusted. The association, we may say, holds quarterly meetings, at which papers of scientific and trade interest are read. It has a reading-room in Georgetown, with a small library and museum, and it is hoped ere long, in view of the Pharmacy Bill passing, to provide means of education for assistants.

SARSAPARILLA MIXTURES.

SPRING has not so far been a great success this year, but whatever the weather be there is a never-failing demand for spring medicine. We may, therefore, opportunely reproduce some formulæ from the *Druggists' Circular*.

Of course, any pharmacist knows how to make a marketable preparation by "reducing" the dec. sarsæ co. conc. and adding some syrup. The degree of dilution is regulated by the size of the dose directed, and the dose in turn is increased or decreased according to whether the maker wishes to supply a big package or a little one. In the following formulæ dec. sarsæ co. conc. may be used in place of the fluid extract, and some pleasant-flavoured tincture in place of the diluted alcohol (proof spirit).

For a mixture to give the average dose (a dessertspoonful), and to be put up in the customary size of package, the following may be taken as a model:—

	Oz.
Fluid extract of sarsaparilla	4
Diluted alcohol	4
Syrup	8

Sarsaparilla does not stand alone in the estimation of the medical public, and it is usually mixed with something else. Numerous mixtures have been, or still are, in vogue, of which the following are specimens:—

Sarsaparilla and Yellow Dock.

Fluid extract of sarsaparilla	5 fl. oz.
Fluid extract of yellow dock	4 "
Fluid extract of stillingia	5 "
Fluid extract of May-apple root	1 "
Fluid extract of senna	2 "
Oil of wintergreen	20 mins.
Oil of sassafras	20 "
Diluted alcohol	20 fl. oz.
Syrup	35 "

Sarsaparilla and Stillingia.

Compound fluid extract of sarsaparilla ..	2 oz.
Fluid extract of stillingia	1 "
Fluid extract of yellow dock	1 "
Syrup	12 "

Sarsaparilla with Potassium Iodide.

Compound fluid extract of sarsaparilla ..	2 oz.
Compound fluid extract of stillingia ..	1 "
Fluid extract of guaiacum	½ "
Fluid extract of buckthorn bark	½ "
Oil of wintergreen	5 mins.
Oil of sassafras	5 "
Elixir of calisaya (made from alkaloids without acid)	4 oz.
Iodide of potassium	2 drs.
Syrup	8 oz.

These formulæ are rather suggestive of ancient poly-pharmacy, and the last one, by the addition of the iodide, is rendered probably too active for "popular" use, where a remedy is apt to be employed with freedom and bad judgment. The simpler kinds of sarsaparilla are far safer, especially as they are often used by people with imaginary maladies.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, April 30.

ACID (CITRIC).—The market is quiet, but rather firm, at 1s. 8½d. per lb. For concentrated juice the quotation is now 26l. 10s., f.o.b. The imports of concentrated juice into this country during the month of April were 55 pipes, against 634 pipes in April, 1890. The imports of juice during the first four months of this year are said to be 1,887 pipes (equal to about 300 tons of citric acid) short of the imports during the corresponding period of 1890.

ACID (TARTARIC).—The market is rather dull—English at 1s. 2½d. to 1s. 2¾d., foreign acid in crystals at 1s. 2½d. per lb. Lowest price for crystals is nominally 1s. 3d. per lb. The German conventions have reduced their quotation from 1s. 3½d., at which it officially stood until a few days ago, to 1s. 3d. per lb., in order to combat the competition of English makers. We believe that arrangements are contemplated for the reduction of the output of tartaric acid in Germany.

ACONITE.—Twenty bags Japanese were offered to-day; they may be bought at 25s. per cwt.

ALOE.—The supply at to-day's public auctions was exceedingly small: 22 cases *Cape* were nearly all bought in at 21s. to 21s. 6d. per cwt. for fairly bright slightly drossy quality; fair seconds sold at 19s. 6d. per cwt. Of 102 cases *Curaçao* 66 sold, mostly without reserve, from 34s. for fair livery down to 6s. 6d. and 6s. for very common overheated. Forty packages *East Indian* aloes were mostly disposed of, good softish brown from Bombay at 75s.; fair yellow *Socotrine* in monkey skins at 65s. (mouldy ditto at 50s.), and red softish *Zanzibars* at 50s. per cwt.

ANNATTO.—A parcel of 12 packages bright Ceylon seed is held for 2½d. per lb., an offer at 2½d. being declined; another lot of damp seed sold at 1½d. per lb.

ANTIMONY.—A parcel of crude Japanese was bought in at auction to-day; 37l. per ton is mentioned as the selling price.

ARAROA.—Twenty-one cases, each of one 42-lb. tin, were bought in at 2s. 3d. nominally to-day. We understand that they sell by single cases at 1s. 9d. per oz.

ARSENIC.—Dull of sale at 13s. 9d. per cwt. for best white powder.

BALSAM (COPAIBA).—Four casks, weighing altogether about 43 cwt., of *West African* balsam were offered at to-day's auction; they are held for 2s. per lb.

BALSAM (TOLU).—Of 11 cases offered to-day 5 sold at 1s. 2½d. per lb. for fair quality: for the remainder an offer of 1s. 2d. per lb. was declined.

BENZOLE.—Very dull of sale at 4s. 2½d. to 4s. 3d. for nineties, and 3s. 2d. for fifties.

BUCHU.—The 18 bales recently imported were offered to-day, and all sold, with strong competition, at an advance of fully ½d. per lb.; for round leaves, fine green, 6d. to 6¼d. was paid; fair slightly stalky greenish realised 5½d. to 5¾d.; and yellowish, 5d. to 5½d. per lb.

CALUMBA.—One hundred and nineteen packages were all bought in, no bids whatever being made. For washed root, good yellow, rather small and dusty mixed, 32s. 6d. per cwt. is asked.

CAMPHOR (REFINED).—The market is dull, and no alteration has occurred in the price of English refined. German refined is quoted at 1s. 9½d. per lb. for early delivery, but might be had below that figure for more distant shipment.

CANNABIS INDICA.—In fair demand, but not offering in ordinary qualities; 12 bundles fair greenish tops, somewhat grey and dusty, sold at 4½d., and 7 bales rather more stalky and dusty at 3½d. per lb.

CANTHARIDES.—Of 5 cases *Russian* flies 4 were bought in, 3s. 10d. per lb. being suggested as the price for fair greenish somewhat dusty flies; 1 cask very much water-damaged, sold without reserve, "all faults," at 7d. per lb., and for 1 box of 37 lbs. good bright flies 3s. 10d. per lb. was paid. Twenty casks *Chinese* cantharides were offered, half of them without reserve; the latter were exceedingly wormy and dusty, and realised 9½d. per lb., one lot selling at 10d., thus showing a decline of from 4d. to 4½d. per lb. on the last auction rates. It is expected that there will be considerable arrivals from China shortly.

CARDAMOMS.—The quantity shown at auction to-day was rather heavy and distributed over a great many sale-rooms; 228 packages were included in the sales, several of them showing a very fine quality. The demand was good, but much of what was offering was limited at very high rates; 106 packages sold at steady prices for medium qualities and an advance of fully 2d. on fine grades. The following are the prices paid: Good *Ceylon Mysore* very fine, soft bold pale round, 4s. 2d. to 4s. 4d.; less bold, 3s. 11d. to 4s. 1d.; medium to bold good pale, 2s. 3d. to 2s. 6d.; medium size brown and split, 1s. 6d. to 1s. 8d.; small to bold long palish yellow, 1s. 10d. to 2s.; smaller ditto, 1s. 7d. to 1s. 8d.; small yellow to full, 1s. 4d. to 1s. 5d.; brown split mixed, 1s. 3d. to 1s. 5d. *Ceylon Malabar* medium to bold round full yellow, 2s. 2d.; medium round brownish, 1s. 6d. to 1s. 7d. per lb. *Wild Ceylon* medium sized to mouldy, 1s. *Seed* from 1s. 2d. up to 1s. 10d. per lb. *Tellycherry*, one case very thin brown sold at 2d. per lb. The exports of cardamoms from Ceylon during the period between January 1 and April 6 have been: 1891, 84,887 lbs.; 1890, 126,385 lbs.; 1889, 103,146 lbs.; 1888, 109,235 lbs.

CASCARILLA.—Of 93 packets, 68 imported *via* New York were all sold at a reduction from the prices last obtained. Good yellow woody mixed broken silvery quill sold at 30s. to 33s.; silvery chips at 21s.; and small and dusty brown chips at 19s. to 19s. 6d. per cwt.; for another parcel of 25 bales good rather dusty mixed silvery chips 26s. per cwt. is asked.

CHAMOMILES.—Fifteen bales fair yellowish flowers sold without reserve at 25s. to 29s. per cwt.

CHARCOAL.—At auction, a few days ago, 690 bags Indian (Cuddalore), analysing 61.78 per cent. phosphate of lime, sold, on a basis of 70 per cent., at 82s. 6d. to 87s. 6d. per ton.

CINCHONA.—The large supply of 233 bales *Guayaquil* bark was nearly all disposed of with fair competition, 209 bales selling at somewhat irregular, but on the whole steady, prices: good silvery and mossy quill, 8½d. to 9½d.; medium to bold brown ditto, 5d. to 7d.; mossy chips, 5d. to 5½d.; brown ditto, 3d. to 4½d.; split in thin chips, from 3d. down to 1d. per lb. Of flat *Calisaya* 5 serons damaged sold at 9d. to 1s. 2d.; 74 packages flat damaged *Carthage* bought in at 8d. per lb., only one lot, very badly damaged, selling at 4d. to 5d. per lb. The following figures represent the shipments of cinchona from Ceylon during the period between January 1 and April 6:—1891, 1,382,234 lbs.; 1890, 2,066,737 lbs.; 1889, 2,561,011 lbs.; 1888, 2,839,709 lbs. The following figures refer to the exports of cinchona bark from Java during the eight months between July 1 and February 28:—

	1890-91	1889-90	1888-89	1887-88	1886-87
Private plantations, Amst. lbs.	4,838,965	3,012,630	2,244,870	2,001,171	1,125,310
Govt. plantations, Amst. lbs.	404,645	391,780	529,110	493,653	480,777
Total	5,273,610	3,407,410	2,773,980	2,491,824	1,606,087

CINNAMON.—Ordinary and medium qualities are in good demand at steady prices, but fine grades do not move off so well, and the small transactions reported are at somewhat

lower figures than those prevailing at the last auctions. The present quotations are: First, 7d. to 1s. 3d.; seconds, 6d. to 1s.; thirds, 6½d. to 10d.; fourths, 6d. to 8½d. per lb.

CIVET.—Out of a parcel of 10 horns one sold at 6s. per oz.

COCAINE.—The market is higher on account of the difficulty of procuring raw material, and 21s. to 22s. per oz. is now asked for the usual brands of hydrochlorate of cocaine, the former figure having been paid in several instances. The raw cocaine is said to have advanced 15m. per kilo. within the last few days, and the second of the three annual crops of coca-leaves in South America is also reported to have failed.

COWHAGE.—Four tins fair seedy and stony mixed from Bombay were bought in at 6d. per oz. nominally.

CREAM OF TARTAR has improved in price and closes firm at 97s. per cwt. for best white French crystals, and 98s. for German powder.

CUBEBS.—Quite neglected. Only 18 bags were offered, dusty, partly stalky, and grey mixed; these were bought in at from 10l. to 10l. 10s. per cwt. The shipments of cubebs from Java during the eight months between July 1 and February 28 are given as follows:—1890-91, 604 piculs; 1889-90, 539 piculs; 1888-89, 174 piculs. The exports in the month of February alone amounted to 151 piculs, nearly all of which were shipped to Singapore, and are, therefore, presumably destined for the London market.

CUMIN-SEED.—Fair *Morocco* seed, somewhat mixed with stones, sold to-day at 16s. per cwt.

CUTTLE-FISH remains cheap and continues in fair demand. All offered to-day (29 packages) sold at 3d. per lb. for medium polish, and 2½d. to 2½d. for dark mixed ditto.

ELATERIUM.—One small box Malta squares realised 2s. per oz.

EGG OF RYE.—Dull of sale; but the price of 1s. 2d. per lb. for good bold Spanish is still maintained.

GALLS.—The market for *China* galls is nominal, with some small sales at 60s. per cwt. on the spot. *Turkey* galls are exceedingly scarce in all varieties, green and white being practically wanting, while for good blue Bassorah 59s. per cwt. is asked. It will be some time yet before the new crop is available.

GAMBIER.—Block gambier is flat and lower, with sales of April-June shipment at 22s. 3d. to 22s. 1½d., closing with sellers at the latter figure.

GAMBOGE.—Of 16 cases placed in sale 3 only sold at high prices, realising 12l. for rather broken loose pipe of fair colour, mixed with ricy.

GINGER.—*Jamaica* ginger is flat, and of 624 packages, offered at auction about 300 sold at 1s. to 2s. lower prices: good, 75s. to 77s.; medium to good medium, 71s. to 72s. 6d.; common to low medium, 55s. to 61s. per cwt. *Cochin* ginger is in good demand at 46s. to 51s. for good to fine cut native; 43s. 6d. to 60s. for medium to bold cut new crop, brownish; 20s. to 27s. 6d. for cuttings to ordinary rough and ends. In Liverpool African ginger has been sold at 22s. to 21s. 6d. per cwt., closing at the lower figure.

GLYCERINE.—At to-day's auctions 29 cases German, described as double distilled, 1-260 s.g., were bought in at 55s. per cwt., an offer of 53s. being solicited, but meeting with no response. The manufacturers still keep their quotations at 54l. to 55l. per ton (s.g. 1-260, double-distilled) for large quantities; but second-hand owners offer freely below those rates.

GUM ACCROIDES.—Thirty bales of fair ordinary quality were bought in at 15s. per cwt.

GUM ARABIC.—The market for East Indian gums remains exceedingly dull, most parcels being held for higher prices than buyers are willing to pay. Some business has been done in Ghatti at 30s. to 35s. for fair to good fair, and 45s. per cwt. for good qualities. The following is the range of current quotations:—Amrad—Kurrachee, 50s. to 75s.; Cawnpore, 35s. to 42s. 6d.; Madras, 25s. to 40s.; scented Bombay, 45s. to 50s.; Ghatti—fine selected, 40s. to 55s.; good, 32s. to 40s.; fair, 28s. to 31s.; common, 24s. to 27s.; Aden—selected

slifted, 45s. to 65s.; ordinary unsifted, 30s. per cwt. Several lots were shown, but only a very few sales were effected. Two cases fine bold pale selected *Turkey* gum are offered privately at 24l. per cwt.; 10 bales fair *Alexandria* sorts were bought in at 10l.; 5 cases fine pale selected, of Ghatti character, from *Kurrachee*, at 6l.; while 10 packages brown *Mogadore*, nearly all dust, sold at 39s., and common pickings at 15s.; and 15 bales ordinary red *East Indian* siftings sold without reserve at 5s. per cwt. From Liverpool we hear that the market remains very quiet, the only business being in *Brazilian* at 23s. 6d. (the stock of this variety is becoming very small), and *Senegal* at 69s. per cwt.

GUM BENZOIN.—A considerable quantity was offered to-day, a large proportion of it being catalogued without reserve. Of 117 cases *Sumatra* 71 sold at irregular prices, the better grades being well competed for, and realising almost steady rates, while ordinary gum is about 10s. easier; good seconds, white almonds, fine flavour, slightly false-packed edges sold at 8l. 12s. 6d. to 8l. 15s.; good seconds, small to bald almonds in centre red corners, 7l. 5s.; fair seconds, almondy centres but rather red sides, 6l. 12s. 6d. to 6l. 17s. 6d.; ordinary woody thirds, 52s. 6d. to 57s. 6d. Forty cases *Palembang* were all bought in, fine almondy orange in small boxes, at 60s. per cwt., a bid of 50s. being refused. Of 58 packages *Siam* 28 sold without reserve at some slight decline; very fine bold bright loose almonds at 22l. 10s. to 23l.; small to bold almonds, partly in block, 11l. 2s. 6d. to 12l. 2s. 6d.; ordinary small blocky siftings, 72s. 6d. to 82s. 6d.; grey woody pickings also at 82s. 6d. per cwt. The arrivals of gum benzoin have been rather heavy this week—over 450 cases.

GUM ELEMI.—Fine bright quality has for a long time been exceedingly scarce, and the 16 cases *Manilla* gum of that description offered at to-day's sales were, therefore, expected to realise high prices; they sold with fair competition at 60s. to 61s. per cwt. Another parcel of fair flavoured, but somewhat grey, was bought in at 65s. per cwt. nominally.

GUM GUAIACUM.—Twenty-five cases were sold at 2s. 4d. for rather dusty to good loose tear, and from 1s. 2d. down to 10d. for slaty, blocky, and dull.

GUM KINO.—The price for 2 cases of good *East Indian* kino is 42s. per cwt.

GUM MASTIC.—In Smyrna prices still remain very high, with a firm market. Sales of about 1,000 kilos. are reported from there, at the parity of 2s. 11½d. per lb. for good tears.

GUM MYRRH.—Rather dull of sale. Fine *Aden* picked was bought in at 6l. per cwt., dark *Aden* picked sold at 82s. 6d., and sorts at 72s. 6d.; red chips at 50s., dark ditto at 42s., and dust at 25s. per cwt.

HONEY.—The market was very well supplied with honey at to-day's sales, and the demand proved pretty considerable a good proportion selling at firm prices to an occasional small advance: 38 packages *Jamaica* were disposed of at 32s. to 35s. for thick cloudy and dull to fair brown liquid. Of 22 cases *Italian* 2 cases fine candied pale sold at 40s., the remainder being bought in; fine white 50s. to 55s. Fifty cases *Californian*, each containing two ½-cwts.; thin liquid pale were all bought in at 50s. per cwt. nominally, and 17 cases (2-lb. tins) from New Zealand, fine candied orange honey, sold cheaply without reserve at the rate of 8d. to 8½d. per lb. Of 110 packages *Chilian* honey 91 sold at 40s. to 42s. for thick fine white candied, and from 34s. down to 23s. 6d. for amber to ordinary thick red. At Liverpool 45 barrels third pale *Chilian* sold by auction on Tuesday at 26s. 6d. per cwt. ex quay. Of *Pile* 1 sales are also reported at 32s. per cwt.

IPECACUANHA.—Fifty-nine packages were offered to-day, but the market showed little animation, and 29 sold with some difficulty at an irregular decline of about 3d. per lb.; fair to good stout annulated root, sound, selling at 7s. 6d. to 8s.; damages at 7s. 5d. to 7s. 9d. per lb.

JABORANDI-LEAVES are advancing in price, and sales are reported this week at 8d. per lb. for fair quality in Liverpool.

JALAP.—Lower, one parcel of 32 bags of recent import being forced off at 1s. to 1s. 1d. per lb. for mixed sized tubers, good quality *Vera Cruz*, and from 1s. down to 8d. per lb. for the damages.

KOLA.—About 60 packages were offered, nearly all very ordinary quality, mouldy, wormy, and badly-dried *West African*; these sold at from 2½d. down to 1½d. per lb., while a few lots fair to good bright and well-dried realised from 5½d. up to 10d. per lb.

KOUSSO.—One bale loose dusty and broken flowers is held for 1s. 3d. per lb.

LOOFAHS.—Ten bales *Japanese* loofahs were offered to-day, and of these 5 bales of 3,000 each, small ordinary dark, sold, subject to approval, at ½d. each.

MARSHMALLOW.—The present price of marshmallow root is so unusually low as to merit attention.

MERCURIALS.—On Monday the English manufacturers, acting by agreement as usual, reduced the price of all mercurials by 1d. per lb. Calomel now stands at 3s. 2d., corrosive sublimate at 2s. 6d., red and white precipitate 3s. 4d. per lb., and others in proportion.

MUSK.—A very poor show was offered to-day. Of 3 caddies *Tonquin* pods first pile, 1 sold, fine blue skin and underskin dry medium to bold pods, well trimmed, at 82s., which was rather a full price; and 3 caddies ditto, rather damp and spurious, third pile, at 51s. per oz.

MUSK SEED.—For 9 boxes *West Indian* 5d. per lb. is required.

OIL (CASTOR).—The Liverpool market is firm, with a fair amount of business passing at 3½d. to 3¾d. per lb. for good Calcutta seconds, 3½d. to 3¼d. for first-pressure French, and 3¼d. to 3½d. per lb. for second-pressure French. The demand for oil for shipment is improving. Under date of March 8, Calcutta reports a good demand, with steady business for delivery, at some advance in price. The arrival of castor seed had been very heavy, and hence prices for this article were lower; but, nevertheless, the production of oil remained small, and crushers were well supplied with orders. Our market remains firm, and at to-day's auctions 15 cases fair pale Italian realised 4½d.; per lb. for fine pale Calcutta 4d. was refused, while fair seconds were held for 3¾d. per lb.

OIL (COD-LIVER).—Prices are still at a low ebb, although a slightly firmer feeling has been manifested lately. The quotation for fine new non-freezing Norwegian oil is 66s. to 68s., c.i.f. terms, per barrel. The catch of fish during the closing part of the Finnmarken season has been so great as to outweigh altogether the deficiency of the Lofoden fishing. In fact, the number of fish caught this season is larger than in almost any preceding year. Owing to the high prices which were obtained for fine medicinal oil early in the season, the output of this class of oil has been quite unusually large this year. The reports of the Finnmarken fishing continue favourable.

OILS (ESSENTIAL).—The first consignment of *cassie* pomade shipped from British India has recently been received in London, and is now offering. It is only a sample shipment, but if successful it may be the precursor of large quantities as the flowers are found growing wild in abundance. It is claimed for the Indian pomade that it is very considerably stronger than the strongest French. As regards Italian oils the stock of *bergamot* is being very considerably reduced, and higher prices are anticipated during the summer. Oil of *lemon* is also again reported to be dearer, and one of the principal shippers has raised his quotation to 9s. per lb. f.o.b. Palermo. At auction to-day 4 coppers of rather ordinary quality sold "without reserve" with good competition at 5s. to 5s. 9d. per lb. News comes from Spain that the output of *geranium* oil will be a very small one this year, the plantations having suffered greatly from frost. Prices have already advanced, and 100f. to 120f. per kilo. is spoken of as the price. French oils will also be scarce this year; this applies especially, so far as is known at present, to *rosemary* and *thyme*. *Star-anise* oil is still tending downwards in value, and may now be quoted at 6s. 5d. to 6s. 6d. per lb. American oil of *peppermint* is also lower. For 20 cases *HGH* brand offered at sale to-day, 13s. per lb. was suggested

as the price. *Citronella* oil is slightly firmer with sales at 1½d. per oz. for fair native oil in tins. At the auctions an offer of ¾d. per oz. was refused for one lot. The following figures give particulars of the shipments of the principal Ceylon essential oils in the periods between January 1 and April 6:—

	1891	1890	1889	1888
	Oz.	Oz.	Oz.	Oz.
Citronella and lemon-grass ..	3,450,300	2,134,864	3,559,656	1,830,435
Cinnamon and cin-namon-leaf ..	13,755	7,891	14,719	31,689

OPIUM.—Our market remains very quiet, with a small hand-to-mouth business at unaltered prices. *Persian* opium, however, still enjoys a fairly steady demand, and small sales are continually reported at 10s. to 12s. for good to fine quality. Fine druggists' opium neglected and nominal at 9s. 6d. to 10s., but in seconds some business takes place from time to time at 8s. to 9s. per lb. Soft shipping opium firm at 11s. 6d. to 13s. per lb., according to quality. The following report, dated April 18, is to hand from Smyrna:—"Nothing positive can as yet be said about the next crop. Everything depends on the effect of the yield: a field which gives 100 chequis in an average year may give 150 to 170 in a very good year, and 50 to 60 in a moderate year. Last year, for instance, the produce reached the figure of 5,000 baskets, only on account of an exceptionally abundant yield. Experience teaches that, in order that the plants may bear well, very dry weather is necessary for two or three weeks before the gathering. On the contrary, they do not bear well in rainy and damp weather. Consequently the fine prospect presented by the crop at the present moment might be for the most part destroyed at the last moment. Although the crop looks well just now, still it must not be forgotten that partial and somewhat considerable damage was done during the winter, and we must not therefore reckon upon a very large crop, notwithstanding the fact that much opium has been sown. It would be wise to take to the figure of 7,000 baskets as a basis, but still to act prudently, so as to guard against surprise, one way or the other, according to whether we get very suitable or very unsuitable weather. Besides the effect of rain at gathering time, the plants which produce opium may perish before they come to maturity of excessive heat. Heat sufficient to produce such a disaster seldom occurs, and has only been known twice in the last 30 years." From another source these very favourable reports of the crop prospects are fully confirmed, and it is estimated that the crop will not yield less than 7,000 baskets, and may produce 8,000 or more, in which case it is thought prices in Smyrna may perhaps fall to an average of 60 piastres, or 6s. 5d., per lb. at the opening of the season. On April 18 the Smyrna market, in spite of the favourable crop reports and the exceeding dullness of all the buying markets, ruled rather steady. A quiet fortnight had succeeded the active period at the close of March, and sales were moderate, at the parity of 8s. 4d. to 8s. 5d. per lb. for soft new examined Karahissar, 8s. 2d. to 8s. 3d. for old examined ditto, 7s. 10d. for taleqnale Karahissar, and 8s. 2d. to 8s. 3d. per lb. for old and new taleqnale yerli. The stock in Smyrna is said to be about 700 baskets, with a possible margin held for a number of small people in the interior.

POTASH SALTS.—In Liverpool best Canadian *potashes* are lower, and sales are reported at 27s. 9d. per cwt., indicating a decline of 1s. 3d. on the week. Best Montreal *pearls* dull at 46s. 6d. nominally. *Chlorate* slow of sale at 5½d. per lb. *Bichromate* quiet at 3¼d. per lb. English yellow *prussiate* exceedingly scarce at 10¼d. to 10½d. per lb. British refined saltpetre, according to packing, is worth 20s. 9d. to 21s. 9d., and German 20s. per cwt.

QUASSIA.—At to-day's auctions about 27 tons of new wood were offered and all bought in at nominal prices from 5l. 5s. up to 6l. per ton.

QUICKSILVER.—On Monday the principal importers reduced their quotation to 7l. 15s., at about which figure they are said to have made considerable sales. Since then the

price has remained steady at that figure, second-hand being more or less nominal.

QUININE.—There has been some further improvement in the market since our last report, and we hear of sales at 10½d. per oz. for about 16,000 oz. German (second hand) on the spot, and 11d. for a small parcel July-August delivery. There are now no sellers below 10½d. for spot, and it is said that for forward delivery there are buyers at that price. The Brunswick agent is reported to have refused an offer of 11d. per oz. and to stand out for 1s. per oz., while the B & S agents say that they are willing to submit offers of 11½d. per oz. for delivery up to July. At to-day's auctions 5 cases, each of 100 oz. vials of Howards' quinine were bought in at 1s. 4d. per oz. There were no bids when 1s. 3d. was suggested.

RHUBARB.—Of 57 cases offered to-day 29 sold, with fair competition, at irregular prices, in some instances slightly easier. *Shenshi*: round medium to bold fine bright coat, three-fourths grey, one-fourth dark fracture, at 2s. 2d.; ditto small to medium, nearly all good grey pinky, fracture, 1s. 10d.; small flat ditto, 1s. 5d.; small druggists' root, 1s. 8d. to 1s. 9d.; pale coat flat, slightly wormy, three-fourths pinky-grey, one-fourth dark fracture, 1s. 11d.; fair pickings, 1s.; ordinary very dull grey coat and colourless fracture, 9d. per lb. *High-dried*: flat small, half dull, half fair fracture, slightly wormy, 1s. 2½d. per lb. *Canton*: fair to good druggists', 1s. 5d. to 1s. 7d.; medium to bold bright coat, seven-eighths good pinky, one-eighth dark fracture, 1s. 6d.; smaller ditto, 1s. 3d.; medium to bold fair coat, round, half pinky, half darkish fracture, 1s. 3d.; good pickings, 1s. per lb.

SAFFRON.—Reports from Spain mention an advance of 2s. to 2s. 6d. per lb. in Valencia, and from 1s. to 1s. 6d. in Alicante, saffrons. In justification of these increased quotations it is stated that the stocks are becoming small everywhere, while the French crop (*gatinais*) is expected to be almost nil this year. The present quotations are 34s. 6d. to 35s. for good Valencia, and 27s. 6d. per lb. for ditto Alicante.

SARSAPARILLA.—*Honduras* in fine brands is scarce, and a parcel offered to-day is held for 1s. 8d. per lb.; another lot of somewhat ordinary quality sold at 1s. 1d. to 1s. 3d.; good grey round *Jamaica* sold at 1s. 2d. to 1s. 4d.; damages at 1s. 2d. to 1s. 3d.; and a parcel of red native root realised 1s. 4d. per lb.

SCAMMONY-ROOT.—The price named for 15 bales, slightly mouldy, is 25s. per cwt., but no one would have them. Another lot sold, without reserve, at 27s., damaged at 24s. per cwt.

SENNA.—One hundred and fourteen packages *Tinnevely* leaves, all in second hand, were offered to-day, and only 18 sold at 2½d. for medium greenish, slightly rusty, to 1½d. for ordinary rusty yellow leaves. Six packages *Alexandrian* were all bought in, small siftings being held at 4½d. per lb.

SHELLAC.—Previous to the public auctions on Tuesday hardly any business was reported. At the sales 1,247 cases were offered, although a larger quantity had originally been catalogued, and of these about 750 cases sold at irregular rates, *orange lac* generally at 1s. to 2s. decline, but improving towards the end of the sales, and ultimately recovering the full; *button* without quotable change, and *garnet* about 1s. below the quotations of the preceding Tuesday. The following prices were paid: Good to fine, 64s. to 66s.; fair to good pale second, 61s. to 65s.; ordinary red to fair, 57s. to 66s.; good free garnet lac (AC), 60s. to 61s.; button lac, ordinary first to good third, 68s. to 57s. per cwt. Since the auctions the market has relapsed into great quietude. The Calcutta market on March 8 was reported very quiet. The prospects for the Bysacki sticklac crop were said to be improving; and as the market was ill-sustained by foreign buyers, prices seemed likely to decline still further.

SODA SALTS.—*Bicarbonate*: Steady at 7l. 5s. for kegs. *Nitrate*: Dull and quiet at 8s. 10½d. to 9s. 6d. *Caustic*: 70 per-cent. white, on the spot, 11l. 7s. 6d. *Crystals*: Rather dull at 62s. 6d. ex ship.

TAMARINDS.—On Wednesday 323 barrels new crop Barbadoes tamarinds were offered—the first arrivals this

season, and sold with very poor demand at 3s. 6d. to 4s. below the opening prices of the previous season—viz., 15s. for fair bright. For dark and dry new Antigua 11s. to 12s. 6d. per cwt. has been paid privately.

TEA.—The China market has again had a heavy supply in public sale, the offerings this week being almost entirely useful. *Monings* a grade above common. As was to be expected, prices were weak for all but lowest sorts, and good first and second crop *Moning*, from 6½d. to 7½d., such as were knocked down on Tuesday, are first-rate value and worth attention. As happened last week, after the heavy offerings of *Pan-jong*, prices have recovered slightly, and merchants are unwilling to go on selling at the same rates. Green teas are unchanged, and Scented Capers are very dear for lower grades. The Assam sales are falling off in bulk, and small offerings on Mondays and Thursdays showed full rates for teas under 1s. Finer grades still neglected, and a very small demand from Ireland. A heavy Ceylon sale of 17,000 packages on Tuesday sold firmly for teas under 10d., but 11d. and 1s. teas are cheap and most useful liquor.

TURMERIC.—The market remains rather quiet, but prices are well maintained. *Bengal* in good finger is reported to have sold to some small extent at 15s. 6d. to 16s. per cwt. recently. *Madras* fair to good bright finger is held for 17s. to 18s. 6d. per cwt., and *Cochin* bulbs are worth from 9s. to 9s. 3d. per cwt. At the auctions 260 bags China bulbs were bought in at 16s. 6d. per cwt.

VANILLA.—A rather heavy quantity of Mauritius vanilla was offered at to-day's auctions, and nearly all disposed of at slightly lower prices: good chocolate, partly crystallised, 8in. at 15s.; 5½in. to 7½in. at 12s. to 15s.; 4½in. to 7½in., rather dark, at 9s. 6d. to 11s.; ordinary mixed and dull at from 10s. down to 5s. per lb.

WAX (BEES') continues in good demand, and sells with strong competition. Jamaica, however, barely maintained the last rates while *Madagascar* was full up. *Australian* sold at 6l. 10s. for grey mixed to 7l. for bright yellow mixed colours. Nineteen packages *Jamaica* realised 6l. 15s. to 7l. 2s. 6d. for red and brown to good fine orange. Eleven cases good pale bleached *Calcutta* were bought in at 8l. 10s.; and 48 packages good orange *Mogadore* were bought in at 6l. 10s. to 6l. 15s. per cwt., an offer of 6l. 7s. 6d. being declined for one lot. About 415 packages *Mauritius* were nearly all bought in, except 15 which sold at 7l. 12s. 6d. for fine even orange, and 6l. 5s. for dull brown.

WAX (JAPAN).—The spot quotation for good white squares is 42s. 6d. per cwt. Four cases fine hard squares sold at the auctions at 42s. per cwt.; another lot of 20 cases good white ditto is held for 42s. 6d. per cwt.

CHEMICALS IN THE NORTH OF ENGLAND.

THE market for heavy chemicals continues in a somewhat quiet state, with not much new business doing. It is reported that some of the chemical works in St. Helens and Widnes, and on the Tyne, will shortly be closed. Prices, therefore, are not likely to be allowed to drop below present values.

BICARBONATE OF SODA.—Quiet at 7l. per ton, less 2½ per cent. discount, f.o.b. Liverpool.

BLEACHING-POWDER.—Steady at 6l. 10s. to 6l. 12s. 6d. per ton on rails, and 6l. 15s. per ton f.o.b. Liverpool, in softwood casks; 7l. per ton quoted for hardwood casks, f.o.b. Liverpool. Tyne market unchanged at 6l. 15s. per ton for softwoods, and 7l. per ton for hardwood casks, f.o.b. Tyne.

CAUSTIC SODA rather easier. For 10-ton parcels, 60-per-cent. is quoted 9l. 10s. per ton, 70-per-cent. 10l. 15s. per ton, and 74-per-cent. 11l. 15s. to 12l. per ton f.o.b. Liverpool; 77-per-cent., 12l. 5s. per ton f.o.b. Tyne, all net cash. *Cream caustic*, 60 to 62 per cent., 9l. 2s. 6d. per ton on rails, and 9l. 5s. per ton f.o.b. Liverpool.

CHLORATE OF POTASH.—Quiet at 5½d. to 5½d. per lb. at usual ports of shipment.

HYPOSULPHITE OF SODA.—In steady demand at 7l. per ton in casks, and 7l. 10s. per ton in kegs f.o.b. Tyne; 7l. 10s. and 8l. per ton c.i.f. Liverpool; 7l. 12s. 6d. and 8l. 2s. 6d. delivered Manchester, all net cast and in large parcels.

SODA ASH.—Easier on the Tyne at 1½d. per degree, less 5-per-cent.; Liverpool prices, 5l. 2s. 6d. for 48 per-cent., and 5l. 11s. 3d. for 52-per-cent. *Caustic ash*; 5l. 7s. 6d. per ton for 48-per-cent., 5l. 16s. 3d. per ton for 52-per-cent., and 6l. 10s. per ton for 58-per-cent. *Carbonated*, net cash, f.o.b.

SODA CRYSTALS.—Quiet at 2l. 15s. 6d. to 2l. 16s. per ton f.o.b. Tyne, 3l. 7s. 6d. per ton on rails, and 3l. 10s. per ton f.o.b. Liverpool.

SULPHATE OF COPPER.—Easier, at 16l. per ton, f.o.b. Liverpool, for prompt and forward delivery.

SULPHATE OF SODA.—More inquiry for ground sulphate in casks. Quotations are 53s. per ton in casks for export, and 42s. 6d. per ton in bulk, f.o.b. Tyne; and 40s. to 42s. 6d. per ton in bulk, on rails at makers' works, Widnes and St. Helen's.

MISCELLANEOUS CHEMICALS.—*Alum (lump)*, 5l. 2s. 6d. to 5l. 5s., f.o.b. Liverpool; *Aluminate of soda*, 32l. 10s. per ton, f.o.b. Tyne; *Bichromate of soda*, 2½d. per lb., less 8 per cent., f.o.b. Liverpool; *Bichromate of potash*, 3½d. per lb., less 8 per cent., f.o.b. Liverpool; *Blanc fixe*, 7l. 10s. per ton, f.o.b. Tyne; *Carbonate of alumina*, 27l. 10s. per ton, f.o.b. Tyne; *Chloride of barium*, 7l. 15s. per ton, f.o.b. Tyne; *Chloride of calcium*, 2l. 5s. to 2l. 7s. 6d. per ton in drums, and 5s. per ton extra in casks, f.o.b. Liverpool; *Hydrate of barium*, 8l. 10s. per ton, f.o.b. Tyne; *Nitrate of baryta* in crystals, 18l. 15s. per ton, ditto ground, 19l. 5s. per ton, f.o.b. Tyne; *Nitrate of soda*, 9l. to 9l. 7s. 6d. per ton, f.o.b. Liverpool; *Pearl hardening*, 3l. 10s. per ton, f.o.b. Liverpool; *Sal ammoniac*, 37s. and 35s. for first and second quality, f.o.b. Liverpool; *Silicate of soda*, 140 Tw., 4l. 7s. 6d. to 4l. 10s. per ton f.o.b. Liverpool, 140 Tw., 4l. 5s. per ton f.o.b. Tyne, 100 Tw., 3l. 15s. per ton f.o.b. Tyne, 75 Tw., 2l. 15s. per ton f.o.b. Tyne; pure *Sulphate of alumina*, 5l. 5s. in bags and 5l. 10s. in casks, f.o.b. Liverpool; pure white *Sulphate of alumina*, 4l. 15s. per ton, f.o.b. Tyne; *Sulphate of ammonia*, 11l. 2s. 6d. to 11l. 7s. 6d. for 24-per-cent., f.o.b. Liverpool; *Sulphide of barium*, 5l. 10s. per ton, f.o.b. Tyne; *Sulphur (recovered)*, nominal price, 7l. per ton, f.o.b. Tyne or Liverpool.

THE DUTCH MARKET.

AMSTERDAM, April 29.

CINCHONA.—The bark sales which will take place here on May 14, 1891, will consist of 3,313 bales 75 cases total about 289 tons—divided as follows:—*Java bark*: From Government plantations, 330 bales 22 cases, about 29 tons; from private plantations, 2,983 bales 53 cases, about 260 tons, *Druggists' bark*: *Succirubra* quills, 54 cases; broken quills and chips, 170 bales; root, 14 bales; *C. Anglica* quills, 11 cases. *Manufacturing bark*: *Ledgeriana* broken quills and chips, 2,167 bales; root, 700 bales; *hybrides* quills, 10 cases; broken quills and chips, 93 bales; root, 120 bales; *officinalis* broken quills and chips, 28 bales; root, 18 bales. Total, 3,313 bales 75 cases. The analyses are not yet completed.

GERMAN MARKETS.

HAMBURG, April 27.

ALL branches of our drug market remain exceedingly sluggish, and without any animation. All speculative movement is dead, and a great many articles in which our market is usually rather lively are entirely depreciated, or can only be quoted at nominal rates. Nearly all the more important articles are favouring buyers.

ANTIMONY (CRUDE JAPANESE).—Neglected, and still in a downward tendency. It is offering now at as low a price as 65m. The supplies in first and second hand are rather considerable.

BALSAMS.—*Copaiba* appears to be somewhat easier, and is offering more liberally by importers in all varieties. *Peruvian* is easier, and may be had again at 11½m. to 11¾m.

CAMPHOR (CRUDE).—Both on the spot and for early delivery this article is held at very firm prices, and not obtainable under 135m., but for future shipment prices are declining, and 125m. would buy. *Refined camphor* in very limited demand at the established prices of 3.85m. to 3.90m. All speculative interest seems to have gone out of this article.

CANTHARIDES (RUSSIAN).—Without business.

JALAP.—Offering more freely; prime quality at 2.50m., inferior ditto at 2m.

HONEY.—The new arrivals of *Chilian* are held for high prices, but these have to be conceded to secure any business. Our old stock is become very small.

OIL (COD-LIVER).—Medicinal oil is slightly firmer just recently, but, all the same, prices for fine Lofoden oil remain low, and 60m. is the current quotation.

WAX (BEE'S).—All varieties remain firm and strongly inquired for. There is not much offering.

WAX (JAPAN).—The market is slightly firmer again.

THE NEW RUSSIAN TARIFF.

It is stated upon good authority that the following figures represent the principal alterations in the pharmaceutical section of the new Russian tariff, which will come into force within a few weeks:—

	Roubles per pood			Roubles per pood	
	Present tariff	New tariff		Present tariff	New tariff
Acid (carbolic) ..	0.06	0.20	Soda bicarb. ..	—	0.80
Benzol	0.06	0.20	Magnesite (in lump) ..	—	0.04
Tar	0.06	0.10	Do. (ground)	—	0.10
„ derivatives ..	0.06	0.10	Chloride of magnesium ..	—	0.15
Animal fats ..	0.36	0.60	Sulphate of magnesium (raw) ..	—	0.15
Fish oils (including cod-liver oil) unpurified ..	free	0.75	Ether (gross weight) ..	—	1.00
Spermace (crude) ..	—	0.75	Copper sulphate ..	—	1.00
Fats „ (refined) ..	—	2.00	Zinc „ ..	—	1.01
oleine, &c. ..	—	1.20	„ chloride ..	—	1.00
Stearin	—	2.00	Iron sulphate ..	—	0.50
Paraffin	—	2.00	Silver nitrate ..	—	10.00
Vaseline (crude) ..	—	2.00	Phosphoric acid ..	—	6.00
Borax (refined) ..	—	1.20	Benzoin ..	—	6.00
Argols (crude) ..	—	0.75	Bromine salts ..	—	6.01
Antimony	—	4.03	Mercurial „ ..	—	6.03
Nitrate of soda ..	—	0.65	Bromine ..	—	2.65
Silicate	—	0.50	Iodine (crude) ..	—	2.65
Caustic soda ..	—	0.80	Chlorate of potassium ..	—	2.40
„ potash ..	—	0.80	Permanganate of potassium ..	—	2.47
Ditto (refined) ..	—	4.00	Antifebrin ..	—	10.00
Quinine and its salts	—	6.00	Phenacetin ..	—	10.00
Castor oil	—	2.40	Acid (gallic and pyrogallie) ..	—	6.00
Cocoon oil	—	1.00	Acid (salicylic and salicylate) ..	—	6.00
Palm oil	—	1.00	Bismuth salts ..	—	6.00
Crude glyceric ..	—	1.00	Sugar of milk ..	—	5.00
Essential oils (non-alcoholic) ..	—	6.00	Iodoform	—	10.00
Collodion	—	15.00	Iodine salts ..	—	6.00
Fruit essences ..	—	15.00	Golden sulph. antimony ..	—	3.00
Iodoform	6.00	10.00	All chemical and pharmaceutical preparations unenumerated	2.40	2.65
Chloral hydrate ..	6.00	10.00			
Chloroform	6.70	10.00			
Opium	13.20	15.00			
Laetnarium	13.20	15.00			
Sulphur (raw) ..	free	0.04			
„ (refined) ..	0.12	0.20			
Liquorice juice ..	—	2.50			

“WHAT'S a good name for a druggist's dog?”—“Corks, unless his bark's too heavy.”



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Letters, queries, &c., will be attended to in the order received.

Pharmacy in Italy.

Mr. S. M. Burroughs is now travelling in the East. He has been through Egypt, and we have letters from him dated from Jaffa and Damascus. He promised to let us have any pharmaceutical items which he might pick up on the way, but these seem to have been scarce. At Milan Mr. Burroughs writes:—

We had three hours to wait for the train to Brindisi, so there was opportunity for a walk through the city, which bears many evidences of ancient splendour and of modern enterprise. There are tramcars in the principal streets, and the city is lighted by electricity. The cathedral, which is of white marble, and the most ornamental and beautiful in the world, has on one side of the piazza, facing it, a splendid arcade, in comparison with which the Burlington is microscopic. There is a fine colonnade in front of it, with many handsome shops, among them a tastefully-arranged pharmacy. Further along in the same street—the Strada Victor Emanuel—is the pharmacy established by the late Mr. Zambaletti. There is a wide open space in front of a church, and a colonnade, composed of granite columns, on the three closed sides of the square. The entrance to the pharmacy is from the colonnade, where there are also four windows. The situation is one of the best in Milan. The greatly varied stock shows that they are well up with the times. One of the chief assistants is a qualified Englishman, and therefore the best attention is given to the firm's considerable business with English and American residents and travellers. Perhaps the stock and the Englishman partly explain the good trade with the English people. The next morning we enjoyed a magnificent view of the snow-covered Appenines in the bright warm sunshine with a cloudless blue sky. The farmers were all busy ploughing, and the wheat-fields were already green. The people generally had a poverty-stricken appearance, but have their compensation in the pleasure of keeping up a big tariff and triple-alliance standing army. France, on the other hand, has the satisfaction of retaliating by increasing her tariff against Italy, and so of advancing the price of chickens, &c., all along the Riviera. The new pharmacy regulations in Italy are such as to shut out most of the French proprietary medicines as the tariff war goes on—each country aiming to injure the other by Customs' taxes on imports.

Checking the Cutter.

SIR,—Will you kindly allow us to explain, with reference to the note regarding "cutting," which appeared in last week's issue of THE CHEMIST AND DRUGGIST, that we do not claim for the step we have taken anything more than that it is sufficient for the present needs of our business! We can easily make it more comprehensive if necessary.

Yours very truly,

BLONDEAU & CIE.

Post Office Grievances.

SIR,—We see in your issue of April 25 a notice of our recent correspondence with Mr. Henniker Heaton, M.P.,

respecting our grievances in connection with the Post Office regulations.

We regret to find that we do not enjoy your sympathy. The inference to be drawn from your remarks is that we have no real cause of complaint, and that you, as taxpayers, hold that opinion.

We also are taxpayers, and our grievance is simply that we are denied the impartial application of certain Post Office regulations. Thus, whilst we are refused the renewal of our registered telegraphic address, "Toothblock," as one word, on the ground that it has not "Webster's Dictionary" authority, you and scores of others are not so restricted.

We cited "Chemdrug" as an example. The renewal of this, you inform us, was refused to you, but you omit to state on what ground. It could scarcely have been the same as in our case, for "Chemicus," your substituted address, though well understood, is not English, and does not occur in "Webster's Dictionary."

The telegraphic authorities, to be consistent, ought at once to require you to substitute some other address. We ourselves, however, consider compound words most appropriate. The object to be attained in registering an address we take to be brevity and ready identification. Surely those who pay a fee of 21s. per annum are entitled to some equivalent for their money.

A short address benefits the sender of a telegram, and the receiver only indirectly.

If you will permit us to express an opinion, we say distinctly that we consider you have made a change for the worse in adopting "Chemicus" in lieu of "Chemdrug" as your registered address. The latter at once suggests the name of your influential journal, whereas the former would seem to refer to nothing distinctive.

In conclusion, we may state that we declined to register our address as three words—"Tooth Block, Preston"—as suggested by the authorities, as we gained nothing by so doing, our original unregistered address—"Oscar Sutton, Preston"—being three words.

We have fallen back upon this, and the sum of one guinea per annum is lost to the department and the taxpayers.

Yours faithfully,

Preston, April 29.

OSCAR SUTTON & Co.

The New Dental Vibrator.

SIR,—I notice that you have, in some recent numbers of your journal, given prominence to the use of the electric current in extracting teeth. In your last issue you have given an illustration of the dental vibrator, and recommend your readers concerned in the same to make inquiries of Messrs. Woodhouse & Rawson. I am one of those who have made these inquiries more than once, and found the information derived from that quarter to be very meagre. It is true they have now one of the vibrators on view, which they say is of American make. They are about to make some, but they cannot tell when they will be ready—they seem to be as far advanced with them now as they were six weeks ago—neither can they let you try the one they have.

Not being quite satisfied with these explanations of Messrs. Woodhouse & Rawson, I sought for information elsewhere. I find that there is a little hitch about the "vibrator," as the proprietors (one, if not more, is an L.D.S. Eng.) are about to patent it, or have already done so, with the idea of floating a company, who will sell the vibrator and chair, with the right to use it, for 20%. The proprietors of this vibrator are not the first to hold out for royalty; for in the year 1858 Dr. F. B. Francis, dentist, of Philadelphia; Mr. Davenport, dentist, of Hull; and Mr. Snape, dentist, of Chester, simultaneously made a similar claim. Then it turned out that Mr. Waite, of Old Burlington Street, had exhibited their great discovery at the Great Exhibition of 1851, and had liberally and unreservedly thrown open his invention.

On Tuesday, October 12, 1858, a meeting was held at the then College of Dentists' Rooms, 5 Cavendish Square, to discuss the merits of electricity in dental operations. The chair was occupied by Mr. P. Matthews, supported by Mr. S. L. Rymer, Dr. Elliottson, F.R.S., Professor Owen, F.R.S., and Dr. Donovan, the celebrated phrenologist. Some of the speakers had used electricity for extracting teeth a few hundred times, and as far back as 1834. In a great many

cases it was quite successful; in others it proved to be a failure. Mr. Harness, of electric-belt fame, has rigged up a vibrator of his own; and I believe the vibrator company threaten him with prosecution, which he challenges.

I think, considering the present muddled state of this vibrator business, and that it is by no means new, it is hardly worth while for your readers to bother themselves about it. For it seems to me that its promoters are far more desirous to make a profit than they are to benefit their profession or suffering humanity.

I am, yours faithfully,

53 Great Marylebone Street, W., T. C. REECE.
April 28.

Was it a Bargain?

SIR,—I am credited by those people who know me with being a very exact, methodical man, a man with plenty of ideas, combined with two good-sized bumps of caution. To describe myself as fussy would, indeed, be wrong, but my exactitude in manipulation and care against untoward accidents make it a foregone conclusion that anything I attempt will be a success.

I may mention that, in my business of dispensing chemist, I make almost everything a man with small accommodation can make, and, in filtrations, percolations, distillations, and also analyses I work with the simplest apparatus, of my own make or made under my instructions. I have found it one of the minor troubles of my life to drop across a mechanic who can make what I want with the maximum of skill on his part and the minimum of talk on mine.

Well, a few days ago the ingenious man of whom I had been in search so long turned up, and, announcing himself as a pharmaceutical engineer, planted his basket of wares in the middle of my shop, and, before I had time to thank him for coming, he had placed a stove, saucepan, condenser, and evaporating-dish (all in one) on my counter, on the top of various light woollen articles. I am usually given to speak very plainly, but I really had not the courage to intimate, even in the mildest manner, that there were two or three dozen glass tumblers underneath, and that he was much too vigorous in their vicinity. I felt that he had come to sell me that lot, and that I should either have to fight him or buy. After turning the matter over, I mentally resolved that I should keep my dignity better by doing the latter. After fitting and unfitting the apparatus, and keeping me in a chronic state of anxiety as to the safety of my glassware under his apparatus, the pharmaceutical engineer whipped the whole lot up and transferred them to the other counter, where the gas is fixed, and, whilst holding forth eloquently, and mixedly at times, about the merits of the combined Bunsen stove, steam-bath, drying-apparatus, and distilling-apparatus, all complete in one, after the manner of "Dr." Alembic, whereby waste spirit from pressed tincture-marks may be recovered, ointments made, or evaporations carried on, all at the same time, he disconnected my gas, upset one of my evaporating-dishes (it was a milk analysis rapidly approaching completion), and, with a word of comfort (!) to me that he had not broken anything (!), forthwith connected my gas with his stove, and in about three minutes he was distilling water in quite a happy manner. Need I say that, after his assuring me that the apparatus required no still licence, having neither head nor worm, I became the happy possessor of the lot, and my till showed an immediate depreciation. After taking the engineer's address, and being assured by him (I am afraid I am most credulous) that, on his uttering the magic words "pharmaceutical engineer," he was allowed to enter every laboratory which he approached, and, after my mildly expressing my wonder at his ever being allowed to depart, we parted.

Now, sir, the only other apparatus I ever bought from "road" gentlemen, being a twelve-fold useful instrument, equally good for corns, tin tacks, laying down carpets, cutting wires, glass, champagne-opener, &c., and which broke miserably on first using, and, after bearing in mind Max Adler's wonderful patent folding step-ladder, I am fondly hoping I have lit on a good thing at last. But my dreams are tinged with visits of excisemen, looking up illicit stills, explosions caused by careless usage at the hands of my young men, shop on fire through spirit and stove being in too close proximity, that I feel doubtful as to whether I

ought to number this wonderful apparatus among my laboratory stock or give it to my wife to boil potatoes in. I am afraid if I told her how much I gave for it, her patient, housewifely, economising nature would rebel. However, to see if the address given me is in order, I think I will write and ask for quotation for one dozen, and then, if the thing "busts," I shall probably have something to catch on to. I do not sign my name, as I don't wish it to be so widely known how easily I am dealt with, else probably it would end in my receiving a dozen commercials to one customer. What say you?

Yours truly,
A. B. C. (39/7.)

Chemists' Windows.

SIR,—Your correspondent, "A Disgusted Merchant," seems to have forgotten the old motto, "Honi soit qui mal y pense." I once had a shop with a very old-fashioned window-enclosure, and one part in particular was a source of constant irritation, until one day I was inspired, and most happily. I had the place cleaned out, filled up with bed-pans, urinals, &c., and never had occasion to remove them again (except for cleaning purposes) as long as I held the shop.

Business, with a profit too, increased in that direction at once, and naturally brought trade in other things.

Moreover, I know for a fact that my venture was greatly appreciated by the public. It was frequently remarked, by ladies chiefly, that they did not know before where such things were to be had, or did not know such things were made.

This is my experience in a fashionable locality, and patronised chiefly by the fair sex, and I trust it will prove useful to some of your readers in these hard times.

Faithfully yours,
NORTH DEVON. (25/45.)

LEGAL QUERIES.

30/32. *Ignoramus*.—An employer is not bound to allow his assistant a holiday, but if he gives it he, of course, pays salary during the time. This can easily be made a matter of agreement. In large businesses the assistants are generally allowed a fortnight's holiday in turns.

32/7. *Incognito*.—If you have the *DIARY* for 1888 read the section on "Doctors' and Chemists' Responsibilities" on page 156. In cases of error a verdict for damages is much more easily obtained than a conviction in a criminal prosecution. The decision in your case will depend on which side can convince the judge. As far as we can gather from what you tell us your opponents will be likely to present the better case. They can offer some tangible evidence, while you can only assert the improbability of having made a mistake. Whether you had a right to prescribe or not is not in question, and, though it may be introduced to prejudice you, the judge ought not to be influenced by it.

31/32. *Nemo* says:—A bought a business for his son B, consisting of goodwill, stock, &c., with a verbal understanding of a fifteen-years' tenancy, B to pay his father back in four years, when he found he could only pay half. Afterwards A bought the property, no lease having been drawn up either before or after (there not being time before, and, on account of differences, it was not done after), but it was understood that the originally agreed term of fifteen years should remain. Four years after A sells the property. Can B claim for his goodwill? The position was a great consideration in first buying.

[The particulars given by our correspondent are extremely meagre for the purpose of an opinion, but the law on the subject of part-performance is well established—namely, that where there is a verbal agreement to grant a lease, and the tenant enters into possession and spends money on the faith of such an agreement, he is entitled to have the lease. A certainly would be bound by this arrangement, and so would the purchaser from A. As we have mentioned before, there are two kinds of goodwill—one local and one personal. The goodwill in this case appears to be entirely local, and is

practically part and parcel of the lease to which B is entitled, and he is therefore entitled to be paid for his goodwill, as equity treats as done that which ought to be done.]

33/61. *Nemo*.—We do not think the omission of the word "for" on a handbill or label—such as "Infants' Preservative [for] wind, gripes, &c."—would relieve the preparation from liability to medicine-stamp duty. The recommendation is evidently implied. The only way to be certain on the point is to send the bill to Somerset House for an opinion.

34/27. *Tempora*.—If you have only sold the ordinary salicylic acid corn-solvent you would have a good case to defend. You could easily bring trade evidence to prove that this preparation is in daily sale in almost every shop, and medical evidence to prove that it could not do harm if properly used.

34/34. *Santonin*.—You must give a month's notice, no matter how you have been paid, because it is the custom of the trade.

31/43. *G. J.*—You would, no doubt, be liable to pay for all the syphons which it could be proved had been supplied to you and which you had not returned. The payment of a deposit does not make any difference so long as it is clear that it is merely a security for the return of the syphons. The question is always, In whom is the property in the goods? The payment of a deposit does not pass such property unless it is meant as a part-payment for the purchase of the goods, which is clearly not the case here, as the words on the invoice and the syphons negative this view. If the purchaser of a business takes over syphons on loan he is, of course, liable to return such syphons to the manufacturer by whom they are lent. He is only, however, liable to return such syphons as come actually into his possession or into the possession of some person on his behalf. The action of the manufacturer being one of trover to recover back the actual goods, it is necessary, in order to succeed in such an action, that the manufacturer should prove that the person sued has at some time or other had the syphons in his actual or constructive possession, and converted them to his own use by selling, breaking, or otherwise dealing with them. The predecessor who sold the business is also liable to the manufacturer for the return of the syphons. In order to sue the latter successfully, it is only necessary to prove delivery of the syphons to him on loan and a demand for their return; whilst, in the case of an action against the purchaser of the business, the syphons have to be traced into his possession. The manufacturer would therefore, as a rule, prefer the former to the latter action.

MISCELLANEOUS INQUIRIES.

Correspondents who ask replies to be inserted "this week" or "next week" are reminded that we do not guarantee replies, and that their insertion depends upon the space at our disposal for such matters. It is generally impossible for us to find room for queries the same week they are received.

20/43. *G. M. S.*—**Sausage Colouring**.—This is a salmon-coloured powder used to mix with sausage-stuffing in order to impart a bright red colour to it, and so give it a richer appearance than the amount of meat in it can possibly do. The powder is composed of ground rice, and cardinal red equally distributed throughout the rice. It is apparently made by adding the aniline colour to the rice in a state of solution, mixing very carefully, then drying.

257/43. **Impurity in Hydrarg. Oxid. Rub.**—*E. S. V.* sends us a small sample of this compound from a 1-lb. parcel which he has recently received. It contains minute white particles, which he has diagnosed as nitrate of potash, but is doubtful about. Mr. Proctor mentions, in his "Pharmaceutical Testing," that the oxide is "said to be sometimes

contaminated with potassium nitrate." Our correspondent's white particles are not that salt, being insoluble in water, but the extremely small quantity at our disposal prevents us from ascertaining with certainty what they are. We get, however, distinct evidence of nitric acid, both on heating and by the iron test, while calcium reveals itself, copper also very faintly. The grains are, we think, merely particles of limo or earthy matter slightly acted upon by the nitrous fumes during the preparation of the oxide.

15/68. *S. W.*—**White Oils** put up and sold by a veterinary surgeon in Monmouthshire, and used for garget or swollen udders in cows and sheep, highly spoken of by the farmers. This is a thinnish, white emulsion, which separates into two layers on standing. The nearest we can make of it is this:—

	Oz.
Bleached linseed oil	4
Glycerine	1
Saccharated solution of lime	$\frac{1}{2}$
Water to	12

Mix the last three liquids, and shake up the oil with the mixture.

18/17. *Lancs.*—**Tobacco Flavours**.—It is the most uncertain thing in the world to distinguish flavours when they are mixed, and without an elaborate analysis (which we cannot undertake) we cannot vouch for the precision of our results. No. 1 flavour, "Ess. of Ebony Flake," seems to be a mixture of essence of apricot (the principal ingredient), white heliotrope, and a trace of musk with spirit. No. 2, for cheap tobacco, is mainly coumarin dissolved in spirit, and rounded off with musk and lavender. You will have to try a little synthesis on your own account, and if you succeed in pleasing your customer, we expect you to communicate your formulae.

15/4. *Crinis* sends us a sample of Hair-restorer, for which "a customer pays a so-called hair-doctor 10s. a bottle. She [customer or hair-doctor, we know not] states that it is the best possible preparation for making the hair grow." Result of our analysis: A solution of perchloride of mercury—half a grain to each ounce of rectified spirit. The specific gravity of the lotion is 0.836. We can find nothing else in it but spirit and mercuric chloride. It is a 2-oz. bottle we have received; but we take it that the hair-doctor gives more for the half-sovereign. We are not disposed to discredit the assertion that the lotion makes the hair grow, although this is the first time we have heard of corrosive sublimate being put to this use; but it is quite likely that, in parasitic diseases of the hair follicles, it may be highly beneficial.

31/65. *H. C. B.*'s contribution to this department is a **Universal Liniment**, which seems to be a favourite in some parts of the country; at any rate, he is very anxious to make one like it. There is little difficulty about that. It is soap liniment made with common soft-soap and methylated spirit, and to each pint 3 oz. of liq. ammon. fort. is added.

20/15. *S. P. Q. R.*—**Black Mixture for Cattle, &c.**—This comes to us from the Isle of Wight, with a great local reputation. We should make a similar article as follows:—

	Oz.
Tar ointment	$\frac{1}{2}$
Burnt sugar	$\frac{1}{2}$
Turpentine	4

Mix the ointment with a little of the turpentine, and stir in the burnt sugar; then add the rest of the turpentine.

If not black enough, more tar; but the turpentine is the active ingredient.

11/16, *W. W.*; 259/13, *Sydney Subscriber*; 20/4, *H. I.*; 175/22, *Nickel*; 162/8, *Embrocation Powder*; 29/50, *W. S.*; 31/20, *Pax (Paris)*; 30/47, *Borax*.—We shall give your requests attention as early as possible.

25/73. *Tenebras*.—Hire of a Galvanic Battery.—A shilling per week for a 50s. one, with a minimum charge of 2s.

25/42. *J. R.*.—Hire of Water-bed.—Whiteley's charge is 20s. a month, with that as a minimum. We think this a little extravagant if a customer has only had a bed for a few days, when 10s. would suffice; but a great deal depends upon who the customer is. Consideration of that, in many cases, must modify the charge.

25/26. *T. Brown*.—We do not undertake such analyses.

25/15. *J. H.*.—The wines made with orange wine instead of sherry may differ but slightly therapeutically. Antimonial wine will not differ at all. Colchicum wine may contain more extractive, but ipecacuanha wine will be practically the same in effect.

26/12. *A. P. Golden*.—For materia medica alone "Pharmacographia" (21s.) is the best, and for therapeutics Ringer's book (15s.).

26/14. *Vaseline*.—You do not read our pages very carefully, surely, for we have repeatedly stated that the Substitute for Cream of Tartar which is so much sold is acid sulphate of potash, with the addition of about 20 per cent. of starch-powder.

26/2. *Quærens*.—Sulphur or common salt thrown on a fire does extinguish fire in the chimney. In each case the action is due to the vapours produced not providing the soot with the material—viz. oxygen—to keep up the combustion.

26/27. *A. J. F.*.—See the chapter on "Cattle" in "Veterinary Counter Practice."

173/7. *B. & Co.*.—Erasmus Wilson's Hair Lotion.—There are various formulæ for this, but the following is an average one:—

Solution of ammonia	6 drachms
Almond oil	1½ oz.
Honey-water, spirit of rosemary, of each equal parts to make	8 oz.

Mix.

27/19. *Romin*.—No objection, as you will see by referring to "The Art of Dispensing."

22/29. *J. C.*.—We inserted an inquiry last week for names and addresses of merchants supplying Kieselguhr. Messrs. John Moss & Co., of Galen Works, Wilson Street, New Cross Road, S.E., and Idris & Co., Kentish Town, N.W., wrote to us, stating that they could supply.

E. R. C..—We understand the "Moc-Main truss" to be so named to imply that it provides a pressure similar to that of the hand.

28/60. *Mortar and Pestle*.—See our issue of January 3, page 13, for hints as to Indiarubber Cements. The last formula should be the best for waterproof coats, &c., and the cement may be put up in 6-drachm w.m. bottles, with a stiff gum-brush, to retail at 6d.

26/72. *T. W. T.*.—The only thing in the nature of poison which you can risk putting in the haunts of Field Mice is phosphorus paste; but the best means of getting rid of them, or keeping them within reasonable bounds, is a good supply of cats in the neighbourhood.

26/13. *Pax (Paris)*.—Essence of Artificial Musk.—This "musk" is not well adapted for handkerchief perfume, the odour in alcoholic solution being extremely feeble; but you may try the following, in which tincture of Tonka bean is used to give colour and body:—

Artificial musk	5 grains
Carbonate of potash	2 "
Tincture of Tonka bean	2 drachms
Water	4 "
Rectified spirit to	2 oz.

Mix.

Acids are the thing to avoid putting along with the "musk." Alkalies strengthen the odour, which gradually becomes feeble.

23/41. *Moe*.—Blackheads and Pimples.—We take it that these are associated in your case. They indicate some laxity in toilet arrangements, deficiency of exercise, and, probably, want of tone in the system generally. The face should be washed at least twice a day, using a loofah and soap liberally, and preferably a superfatted soap. Touch each spot with lano-creolin at bedtime. First thing in the morning take the following:—

Tartarated soda	40 grains
Chlorate of potash	3 "
Sulphate of magnesia	30 "
Peppermint-water to	1 oz.

For one dose.

Active exercise—walking, tennis, and the like—should be indulged in daily, and care should be taken to wash the skin soon after, in order to clear it of the irritable effete matter which perspiration always leaves. The morning bath, taken with the chill off, is beneficial and invigorating, and as a tonic nothing more than the following is required:—

Easton's syrup	1 Oz.
Water	7 "

Mix.

A tablespoonful at 12 and 4 o'clock.

We must add, however, that upon personal cleanliness, regular habits, and careful dietary much can be done to obliterate blackheads and pimples.

29/74. *H. H.*.—Melissa, Orange, and Rose Waters.—All these, in triple strength, are the saturated watery distillate obtained in the manufacture of the respective essential oils. You may make the waters by taking the oils in the proportion of 1 drop to each ounce of water. Add the oil to very hot distilled water, shake well, and when cold filter through paper moistened with distilled water.

33/23. *F. C.*.—Mr. Barrett's paper is printed in full in the "Journal of the Society of Chemical Industry," published by Eyre & Spottiswoode, East Harding Street, E.C., 2s. 6d.

32/67. *A. W. C.*.—What was the red silk handkerchief dyed with? That is the question which naturally arises from your request, and, failing that information, we should not hesitate to dip the stained white handkerchiefs in weak filtered solution of chlorinated lime.

Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

31/11. Where can penny microscopes be obtained which are mounted on card labelled "Challenge M. M. & S."?

28/53. Formula for arsenical weed-destroyer.

28/11. Dr. Kirk orders a special skin-soap. "Heder" is told that it is made in Ireland. Can it be obtained in England?

THE "A1" COD LIVER OIL

(Trade Mark.)

Is in every respect such as will enhance the high reputation which this Brand has so long maintained.

THE PRICE IS 6/9 PER GALLON, IN WINCHESTERS.

By 12 Winchester 6/6, or 36 Winchester 6/3 per Gallon, to account. Delivery as required.

For the convenience of Chemists, and to secure the "A1" COD LIVER OIL being placed in the hands of the Public perfectly sweet, we have packed it in 8-oz. and 16-oz. green flint oval and flat bottles, at the **LOWEST POSSIBLE PRICE.**

The bottles are sent out either without labels of any kind, or with the blue trade mark labels over the cork, and are either plain or capsuled. The corks are of best quality, and the bottles are packed in boxes with divisions specially made for the purpose, which are charged, but full prices are allowed when returned in good condition.

It will be obvious that by bottling from the original casks, which have not been opened since they left the factory in Norway, the Oil in these small bottles must be in the most perfect condition.

PRICES FOR THE HOME TRADE ONLY.

In Dispensing Bottles—containing 8 oz. fluid

By 6-doz. case. 12-doz. case. 24-doz. case.

- 5/9 5/6 5/3 doz. to a/c.

" " " 16 oz. "

By 3-doz. case. 6-doz. case. 12-doz. case.

- 10/6 10/3 10/ "

CARRIAGE FREE.

N.B.—If less than above quantities are ordered, carriage must be paid by the Customer, unless the order is made up to the value of £5 with Drugs.

SOUTHALL BROS. & BARCLAY, BIRMINGHAM.

BISHOP'S

GRANULAR EFFERVESCENT PREPARATIONS.

"ALFRED BISHOP" was the Inventor and Original Manufacturer of all Granular Effervescent Preparations.
All others are imitations.

SILVER MEDAL, PARIS EXHIBITION, 1889.

HIGHEST AWARD FOR GRANULAR PREPARATIONS.

NOTICE TO THE TRADE.

In consequence of the repeated enquiries for a cheaper Granular Effervescent Citrate of Magnesia, by various houses, we have decided to manufacture a second quality at a low price. Each bottle will bear our Label with Name and Trade Mark. We offer it to our customers with an assurance that, whilst not quite equal in quality to our best, it is far superior in Colour, Effervescence, Clearness, and Flavour, to any of the low-priced articles in the market. We guarantee that as much care is taken in its manufacture as in our first quality, and that it will keep quite as well. We are certain it will enable the Chemist—who finds it necessary to keep a second quality, and who prefers to put it up himself, and with his own Name and Label—to supply his customers with a thoroughly sound and reliable article.

We intend selling it in **BULK ONLY**, at 1s. 3d. per lb., the smallest quantity at Wholesale Terms being 4½ lbs. Our usual Discount given. Special Terms for larger quantities.

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PURE AND CHEAP:

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Bicarbonate of Soda	97.20
Mono Carbonate of Soda	...	---	---	...	1.90
Sulphate of Soda	...	---	---	...	trace
Chloride of Sodium	...	---	---	---	.035
Moisture	...	---	---	---	.82
Insoluble	...	...	...	...	nil

PURE ALKALI,

GUARANTEED 58 DEGREES,

EQUAL TO 98 PER CENT. OF CARBONATE OF SODA.

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Bleachers, Dyers; Glass, Paper, and Soap Makers.

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Applied in Therapy where Antipyrin and Salicylic Acid
are prescribed together, but has no objectionable after-effects, even if taken in doses of 8 grs. *pro die*.

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This is the lightest, and consequently purest Pyro in the trade.

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Purest quality, powdered and granulated. Dissolves colourless in water, alcohol, and ether, free from resinous and colouring matter. For medicine and finest work in art.

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Dissolves colourless in water, alcohol, and ether, free from resinous and colouring matter. Used for similar purposes as the chemically pure powder.

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Light yellow crystals. Insensible to moist air and light.

IODOFORM CRYSTALS.**POTASH BROMIDE CRYST.****POTASH IODIDE CRYST.****POTASH PERMANGANATE CRYST.****RENNET POWDER.****SODIUM BROMIDE.****SODIUM BENZOATE.****SODIUM IODIDE.**

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*For Private Formulæ write for
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DISINTEGRATING—SOLUBLE.

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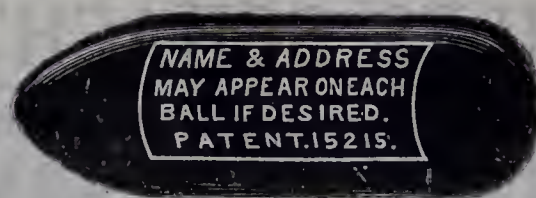
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**EXTRACT of Malt, Cod Liver Oil,
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" 1.—Physic Balls	24/	"
" 2.—Physic Balls	30/	"
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Ditto	2 9	1 3 0
Ditto	(3 fluid oz.)	4 6	1 16 0
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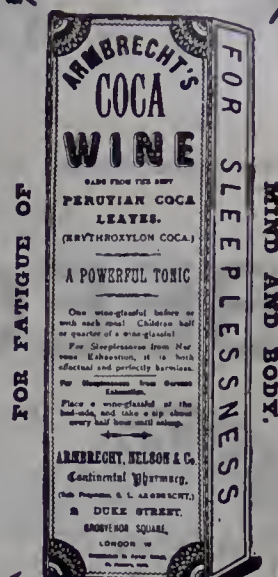
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unexpected rush of applications for our

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Special Articles with Chemist's Name and Address printed on Artistic Labels.

New Order Sheets for 1891, with several hundred articles, on application.

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INTRODUCED IN 1875.

A concentrated restorative tonic, standardised to contain $\frac{1}{2}$ grain of pure alkaloid per ounce.

Bottles—3/6, 33/ doz.; 6/, 57/ doz.

SAVARS CUBEB CIGARETTES.
9/ and 24/ doz.

CASCARA-HAWLEY (Tasteless capsules)
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The
New Anti-
Rheumatic and
Antiseptic Remedy
SALOL
(DURAND, HUGUENIN & CO.)
For treatment of Rheu-
matism, Dysen-
tery, Cholera,
Ulcers, Skin
Diseases
&c.

All
the more
important Salts
of
QUININE
(MILAN BRAND).
Cinchonidine, Cincho-
nine, Quindine,
&c., kept in
stock.

Obtainable through the Wholesale Druggists throughout Great Britain and Ireland, and of

B. KÜHN, 36 St. Mary-at-Hill, LONDON,

SOLE WHOLESALE AGENT FOR THE UNITED KINGDOM AND EXPORT.

PAMPHLETS AND PRICES ON APPLICATION.

JOHN SANGER & SONS

Patent Medicine Vendors,

DEALERS IN

DRUGGISTS' SUNDRIES,



LOZENGES,
Mineral Waters, Perfumery

And TOILET REQUISITES.

As the SPRING SEASON is fast approaching, the attention of the Trade is called to our well-assorted Stock of **SPONGES**.

FLESH GLOVES (TURCO from 1/11 dozen, less 10% and 5% cash for not less than 6 dozen).
Perfume Sprays, Smelling and Toilet Bottles.

Of the latter we have an immense variety of patterns, and a visit to Showroom will well repay intending purchasers.

OUR NEW CATALOGUE will be ready at an early date. Sent post free upon receipt of business card.

Warehouse and Showroom: 489 OXFORD STREET, LONDON, W.

KEARSLEY'S Widow Welch's FEMALE PILLS.

These are universally acknowledged to be the Genuine, and Druggists may safely recommend them.

CAUTION!

The Proprietors of Kearsley's Original Widow Welch's Female Pills find it incumbent on them to caution the purchasers of these Pills against various imitations by parties who have no knowledge of their peculiar preparation, the Original Recipe having been sold to the late G. Kearsley, of Fleet Street, whose Widow found it necessary to make an affidavit, for the protection of her property, in the year 1798. The Genuine Recipe for Widow Welch's Female Pills has been prepared by them for 100 Years! Chemists are particularly requested to remark that, as a testimony of authenticity, each bill of directions contains an affidavit, and bears the signature of "C. KEARSLEY," in writing, also engraved on the Government Stamp, and each box is wrapped in WHITE paper.

All purchasers of one dozen (13 boxes) can have 100 copies of Kearsley's Ladies' Companion printed with name and address.

Price 27s. per Dozen, subject to usual Discount. Special Quotations to Shippers and for large quantities on application to

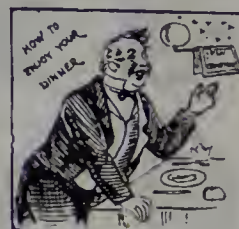
J. SANGER & SONS, 489 OXFORD STREET, LONDON, W.



BY ROYAL LETTERS PATENT.

THE 'FLY CEMETERY'

TRADE MARK REGISTERED.



WE again beg respectfully to call the attention of the Trade to our well-known Non-poisonous Fly Paper, the "Fly Cemetery," the title of which has become a familiar household word. The enormous annual increase in the output is the best proof of its popularity. Last year, in spite of a cold season and a host of worthless imitations (of the skating rink order), we again had an increase of over a million and a half papers above that of 1889. The whole of our parchment paper (upon which the "Honey Fly Gum" is spread) has been specially manufactured for us, so that we are enabled to guarantee its excellent quality, and in order to meet the anticipated further demands for the coming season, we have laid down several new patent machines. The efficacy of the "Fly Cemetery" has been testified to in a remarkable manner by the retail trade, but this year we have received a collection of splendid

Testimonials from nearly the Whole of the Leading Wholesale Houses

dealing in proprietary goods; such a consensus of opinion has never before been published. Samples and Testimonials free on application from the Patentees,

TUNBRIDGE & WRIGHT, FLY PAPER MANUFACTURERS, READING.

CAUTION.

WE beg to warn you against Fraudulent Imitations, as our rights are protected by Patents, and persons offering such imitations for sale are liable to legal proceedings. During last season, 1890, we obtained two perpetual injunctions, the defendants paying damages and costs, and six others gave undertakings in similar terms to avoid proceedings.

Messrs. MANN & TAYLOR, 109 New Oxford Street, London, the solicitors for Messrs. TUNBRIDGE & WRIGHT, of READING, the Patentees and Sole Proprietors, have standing instructions to take immediate proceedings against all infringers.

SEEDS IN PACKETS



THE "WINGED LION"

Flower & Vegetable Seeds

In 1d. Pictorial Packets, assorted to order,
6s. per gross, on $\frac{1}{2}$ gross cards or on 2 gross
Special Counter Show Cases, with gold
lettering. Cases empty, 1s. each.



TRADE MARK.

With all orders for 6 gross and upwards we send free a large Descriptive Plate, Printed in Colours, varnished and mounted on rollers. This new and beautiful Show Card comprises representations of 50 select varieties, and is a handsome and artistic advertisement. We charge this plate 1s. each when required with orders less than 6 gross.

The "Harrison" Show Case, as here represented, made of metal Japanned Black, with Bronze Lettering, to hold 30 varieties, or 2 gross in all. Price 3s. 6d. each empty.

BIRD SEEDS IN PACKETS

(Winged Lion Brand).

Put up in cardboard cases with attractive design in colours. The seeds are carefully selected from the finest stocks, and are free from all dirt and dust.

This combination of Bird Seeds is allowed by the highest authorities to be the best obtainable for all kinds of cage birds.

PRICE.

1d. packets	...	...	...	...	...	9s.	0d. gross.
2d. "	...	...	...	...	...	15s.	6d. "
4d. "	...	...	...	...	...	26s.	0d. "

Packages extra—allowed for on return.

SEND POSTCARD FOR COMPLETE LIST OF SEEDS IN BULK
AND IN PACKETS.



POTTER & CLARKE, Wholesale Botanic Druggists,
5, 6 & 7 RAVEN ROW, ARTILLERY LANE, **LONDON, E.C.**

R C TREATT

Dunster House Mining Lane

LONDON

IMPORTER OF

Musk Civet Ambergris Attar - of - Rose**ESSENTIAL OILS**

Wholesale
and
Export
only.

APPLICATION.

ON

QUOTATIONS

AND

PRICE LIST

WHITE AND SOUND TEETH.**JEWSBURY & BROWN'S****ORIENTAL TOOTH PASTE.**

This old-established and increasingly favourite Dentifrice has been over Sixty Years before the Public; It is warranted to retain its properties and keep in good condition in any climate. The original and only genuine is manufactured solely by

JEWSBURY & BROWN, Chemists, MANCHESTER,

and is distinguishable by the Trade Mark, printed in red and green, a facsimile of which is annexed. Particular attention should be paid to this guarantee of genuineness, as numerous imitations are offered, sold universally by Chemists and Perfumers, at 1s. 6d. and 2s. 6d.

The Trade and Shippers supplied by the leading houses in London and elsewhere. Bills and Show Cards forwarded on receipt of address cards and directions for enclosure.

This old-established and celebrated preparation for the Teeth is attractively put up in the form of Liquid, Powder, and Paste, is now being largely advertised to the public.

**THE GENUINE
EAU DE BOTOT**

IS THE ONLY DENTIFRICE APPROVED
By the Academy of Medicine of Paris.

	Size	Size	Size
EAU de BOTOT	1/6, 11/9;	2/6, 20/;	5/32/9 doz
POWDER	1/6,	8/6;	2/6, 17/ doz.
PASTE	1/6,	8/6;	2/6, 17/ "

Of all Wholesale Houses.

N.B.—See each Article

has the Signature—

SAMPLE BOXES,
Containing
Powder, Paste, & Liquid
per 8/- doz.

IMMENSE SALE.**WOODS' ARECA NUT
TOOTH PASTE,**

As used and recommended by Madame
Marie Rose, the Prima Donna.

PRICE, 6d. and 1s. per Pot.

CAUTION.—SEE "WOODS, PLYMOUTH,"
ON EACH POT.

COLLAPSIBLE TUBES.

METAL BOTTLE CAPS
AND
SCREWED BOTTLES.

For Paints, Perfumes, Soaps, Creams, Oils, and all Fluid
or Semi-Fluid Substances.

PERFUME SPRINKLERS
AND
BOTTLES.

**H. G. SANDERS & SON
MANUFACTURERS,**

VICTORIA WORKS, VICTORIA GARDENS, NOTTING HILL GATE
LONDON, W.

TELEGRAPHIC ADDRESS: "COLLAPSIBLE LONDON,"

ESTABLISHED 1820



[4]



"THE FAIRIES' DANCE."

A copy of this original and beautiful Show Card (copyright), advertising our Perfumes, will be sent carriage paid to any Chemist on application. Sure to induce business. We would respectfully advise friends writing for a Show Card to include a trial order for

"THE SCENT OF THE LILIES"

AND

"THE SCENT OF THE HAYFIELDS"

Retailing at
2/-, 3/6, and 6/6 each.
Wholesale
15/-, 27/-, and 46/- doz.

G. VOGT & CO., Wholesale and Export Druggists and Perfumers, **LONDON, E.C.**
19 LAURENCE POUNTNEY LANE,

General Price List post free.

Telegrams: "ALSACE LONDON."

E. C. Z. A.

THE NEW SKIN SOAP,

MADE ONLY BY

BAYLEY & CO., 17 COCKSPUR ST., LONDON,

THE SOLE AND ORIGINAL MANUFACTURERS OF

"ESS. BOUQUET" PERFUME and of the Celebrated "SPERMACETI SOAP TABLET."

H. P. TRUEFITT'S SPECIALITIES FOR THE HAIR.

Floral Extract, 3/6, 5/-,
10/6, 21/-

Egg Julep, 2/-, 4/-

CONCENTRATED

Egg Julep, 2/6,
5/-, 10/6.

Golden Fluid,
10/6, 21/-.

EUXURON,

1/6.

&c.

Stimulating Lotion, 5/-,
10/6.

Astringent and Tonic

Lotion, 5/-, 10/6.

Quinine and Arnica

Hair Wash, 3/6

5/-, 10/6, 21/-.

Arnica Wash

3/6, 5/-,

10/6.

&c.

EUCHRISMA.
Combines in one clear fluid every valuable component both of a Hair Grease and Wash.
3/6, 5/-, 10/6, 21/-.

EAU RACINE.
For renewing the original colour of Grey Hair, superior to all other restorers, being perfectly simple in its components. Price 6/-.

An elegant Preparation for the Hair and Beard.
Price 2/6, 3/6, 5/-, 10/6, 21/-.

BRILLANTINE.

H. P. TRUEFITT'S TONIC TOOTH BRUSH

(BY ROYAL LETTERS PATENT.)

PRICE ONE SHILLING.

20 & 21 Burlington Arcade; 13 & 14 Old Bond St., London.

DR. ZIEMER'S

"Alexandra" Dentifrices.

LOTION. POWDER. PASTE.

1/3 at 9/- per doz. 6d. at 3/9 per doz. 6d. JARS at 3/9 per doz.

2/ „ 15/ „ 1/ „ 7/6 „ 1/ „ 7/6 „

3/6 „ 24/ „ — 1/ TUBES „ 7/6 „

6/6 „ 45/ „ — 2/6 „ 18/ „

Matchless for the Teeth, Gums, and Breath.

GUARANTEED NON-INJURIOUS TO THE ENAMEL.

Show Cards, &c., on application.

THE ALEXANDRA DENTIFRICE DEPOT

143 Cannon Street, London, E.C.

BARCLAY & SONS, Ltd.

WE ARE STOCKING, AS LAST SEASON,
SPONGES ON CARDS
At HALF the RETAIL PRICE.

Will our London and Country Friends kindly NOTE?

1d. HONEYCOMB or TURKEY	.. ..	6d. per dozen.
2d. " "	.. ..	1/- "
3d. " "	.. ..	1 6 "
4d. " "	.. ..	2 - "
6d. " "	.. ..	3 - "
9d. " "	.. ..	4 6 "
1/- " "	.. ..	6 - "
1/6 " "	.. ..	9 - "

Also Sponges Unbleached, loose. 2d., 3d., 4d., 6d., 9d., 1/-, 1 6, 2/-, 3/-, 4/-, 5/-, 6/-, 7/6, and 10/- per piece, &c., &c.

95 FARRINGTON STREET, LONDON.



LINT.

GAMGEE TISSUE.
(PATENT ABSORBENT GAUZE AND
COTTON WOOL.)

**ABSORBENT
COTTON WOOL.**

ROLL BANDAGES.

ANTISEPTIC DRESSINGS.

ROBINSON & SONS,

COTTON SPINNERS AND MANUFACTURERS OF

SURGEONS' LINTS, COTTON WOOLS,

BANDAGES, & ANTISEPTIC DRESSINGS,

WHEAT BRIDGE MILLS,

NEAR CHESTERFIELD.

Depot—55 Fann Street, Aldersgate Street, London.



Telegrams—
"LINT LIVERPOOL."

THE
LIVERPOOL PATENT LINT CO.,
MARK ST. MILLS,
NETHERFIELD ROAD NORTH,
LIVERPOOL.



LINT. MANUFACTURERS OF
FLAX, & COTTON,
LINTS,
ABSORBENT, AND CARDED
COTTON WOOLS,
ABSORBENT, OPEN WHITE, and GREY
BANDAGES,
SURGEON'S, AND CARBOLIZED
TOW.



Fig. 1.

TRUSSES.



Fig. 2.

H. M. COLWELL'S TRUSS WORKS.

116 NEWINGTON CAUSEWAY AND YORK STREET, LONDON ROAD, S.E.

REDUCED PRICE LIST NOW READY.

Mailed Free with Samples to any address.

MAKERS OF THE NEW COLONIAL TRUSS, PROTECTED UNDER THE PATENT ACT.

Wholesale and Export Buyers only.

Established 55 years.

SPECIAL

**INDIARUBBER
POROUS PLAISTERS.
STRENGTHENING, BELLADONNA,
AND CAPSICUM.**

SEND FOR SAMPLE GROSS.

SEND FOR SAMPLE GROSS.

Manufactured by

WILLIAM MATHER.

Chemists are respectfully informed that by purchasing one gross of any of the above their own Names and Addresses may be printed upon the wrapper and back cloth of each plaister.

PRICE, INCLUSIVE OF PRINTING, **24/-** PER GROSS.

Subject to usual Discount, as per Price List.

W. MATHER.

MANUFACTORY:—

DYER STREET, HULME, MANCHESTER.

London Wholesale and Export Agents:—Messrs. MACE & HALDANE, 94 Milton Street, LONDON, E.C.



R. H. BARRETT,

Flint Glass Bottle Works,

THE OVAL, CAMBRIDGE HEATH, LONDON, E.

THE HEART SCENT BOTTLE (Reg.), for Salts or Perfume.

Is most admirably adapted for pocket use, combining great beauty of design with the maximum of convenience.

Price, Plain or Fluted (in 5 GROSS lots):—12/6 per gross. Assorted WHITE and COLOURED. N.B.—The Caps for these will be fitted, if desired, with indestructible washers, to resist the action of ammonia, which destroys cork in a short time.

METAL SCREW-CAPPED LIMES, in White Flint, Actinic Green, or Amber The Best Bottle for Glycerine or Pills. Prices: 1 oz. 13/6, 2 oz. 15/-, 3 oz. 18/-, &c. per gross

Chemists' and Perfumers' Bottles in great variety, Plain or Stoppered.

Orders may be sent to the PRINCIPAL WHOLESALE HOUSES.

TELEGRAPHIC ADDRESS—"FOREFRONT LONDON."

[3]

NEW CAPSULING MACHINE

The only Machine
which leaves no crease
or pleat on the
Capsule.

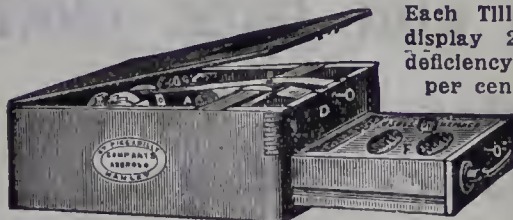


Can be fixed to any
Counter.
A single pull of the lever
is sufficient
to fix the Capsule.

Patentee—C. MELIN, 37 Crutched Friars, LONDON, E.C.

STOKES' PATENT CHECK TILL SYSTEM.

A SOUND INVESTMENT.



Each Till has only to display 2d. per week deficiency to return 15 per cent. on outlay.

30,000

Sales Checked for

3 SHILLINGS.

Terms and full particulars on application.

G. R. STOKES & CO., Limited, Hanley, STAFF.

DISPENSING BOTTLES & PHIALS.
REDUCED PRICES.

3 and 4	6 and 8	12	16 ounce.
7/6	8/6	12/-	16/- per gross
CRYSTAL (BLUE TINTED).			
3 and 4	6 and 8	12	16 ounce.
9	10/-	14/-	18/- per gross.
WHITE PHIALS.			
3/8	4/-	1 1/4	2 ounce.
		4/9	5/6 per gross.
WHITE PHIALS (SUPERIOR QUALITY).			
1/3	1	1 1/2	2 ounce.
4/3	5/3	5/9	6/3 per gross.

I. ISAACS & CO.

GLASS BOTTLE MANUFACTURERS,
25 FRANCIS STREET, Tottenham Court Road, LONDON.

BANKERS: LONDON AND WESTMINSTER BANK.

ESTABLISHED UPWARDS OF 50 YEARS.

ANDREW OHLSON,

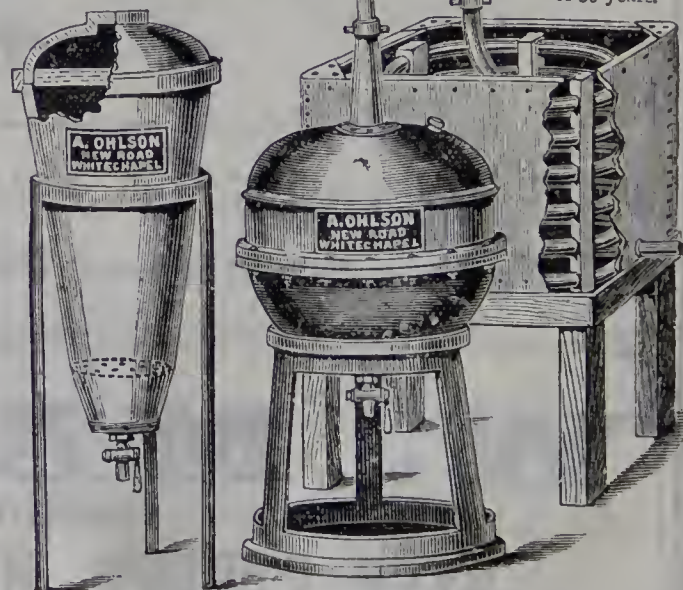
Pharmaceutical Coppersmith & Engineer.

EAST LONDON COPPER
& IRON WORKS,
85 New Road, WHITECHAPEL.

Telegraphic Address—

"ARRAIGNER LONDON."

Established upwards of 30 years.



COPPER PERCOLATOR WITH HYDRO COVER.

COPPER STEAM STILL WITH PORTABLE DOME.

STILLS,
NITRE, AMMONIA,
CLOVES, ALMONDS,
ACETIC, MINT,
JAVENDER,
APPARATUS FOR
DISTILLED WATER,
LABORATORIES FITTED UP COMPLETE.

STEAM JACKET PANS,
EVAPORATING,
BOILING,
TILTING,
CITRATES,
ENAMELLED, &c.,
VACUUM.

MISCELLANEOUS,
OIL SEPARATORS,
COPPER MEASURES,
PERCOLATORS,
HYDRAULIC
FISCHER PRESSES,
SARNA. TANKS WITH
COIL.

WILLIAM TOOGOOD'S

WAREHOUSE AND SHOW ROOM,

BURLINGTON BUILDINGS,

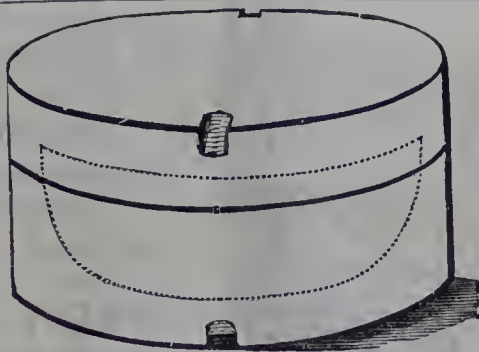
HEDDON STREET, REGENT STREET, LONDON, W.

TOOGOOD'S

IMPROVED PATENT

EARTHENWARE COVERED POTS

Are claimed to be the most perfect and convenient yet offered to the Trade.



Owing to the increasing demand for our Patent Pots, we have introduced a Special THIN Series for Dispensing.

These Pots are beautifully glazed and finished, and, being very light, are specially adapted for sending by post.

ORDINARY THICKNESS—

1 dr.	2 dr.	$\frac{1}{2}$	$\frac{1}{4}$	1	$1\frac{1}{2}$	2	3	4	6	ounces.
1/6	1/6	1/6	1/8	1/10	2/	2/3	2/10	3/6	4/6	5/6 per doz.

THIN FOR DISPENSING—

$\frac{1}{2}$	$\frac{1}{4}$	1	$1\frac{1}{2}$	2	3	4	6	8	ounces.
1/7	1/9	2/	2/2	2/5	3/	4/	5/	6/	per doz.

TOOGOOD'S NEW REGISTERED SLIDE BOXES FOR POWDERS, &c.

REGISTERED No. 154,622.

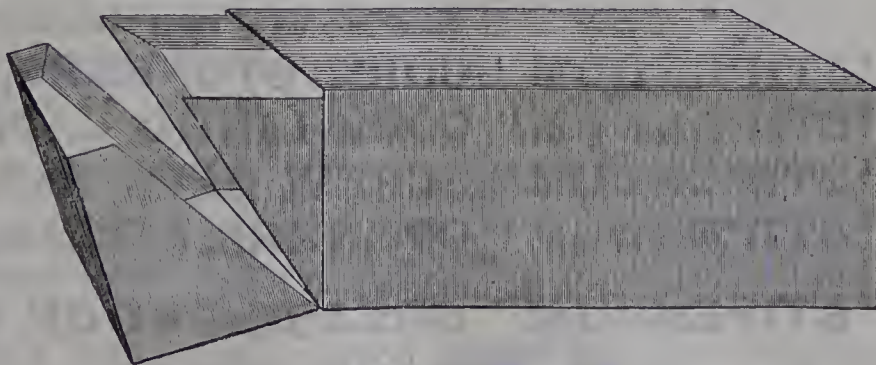
PRICES.

For 6 12 18 24 Powders

White Enamel

6/9 7/9 8/9 9/9 gross

Purple ... 7/9 8/9 9/9 10/9 „



TOOGOOD'S AIR-TIGHT AND GREASE-PROOF PAPER

FOR PACKING LINSEED MEAL, JUJUBES, &c. Demy size, 6/6 ream.

TOOGOOD'S PATENT BRONCHITIS AIR KETTLE,

51/- per dozen.

[2]

SOLE AGENT FOR DR. LEE'S STEAM DRAFT INHALERS.

CHALMERS' PATENT SAMPLE AND PARCELS POST BOX. **THE ONLY BOX**

That fulfils ALL the requirements of the POST OFFICE.



Is fastened INSTANTLY.
Cannot open by accident.
Is immensely strong.
Has no corners.
No seams, joints, nor solder.
Nothing to scratch or tear letters.
Is practically air-tight:—Is used
for Flour, Cherry Blossom,
Sanitas, and Soap-Powders.
Dispenses with string, bags, and
paper.
Saves 19 minutes out of 20.

OVER 300,000 SOLD.

SAVING THEIR OWN COST.

W. B. CHALMERS. 37 MINCING LANE, E.C.

THE "STIPENDUM" STOPPER CO., LIM.

47 LAMB'S CONDUIT STREET, LONDON, W.C.,

Manufacture the following Specialities—

- "STIPENDUM" CORK STOPPERS, in all sizes.
- "STIPENDUM" CORK-LINED CAPS, for Pomade Bottles.
- "STIPENDUM" SCREW CAPS, for Pomade Bottles.
- "STIPENDUM" OPENERS, for Stoppered Aërated Water Bottles.

"STIPENDUM" GREASE-PROOF COVERED POTS IN TERRA COTTA, CHOCOLATE, AND BLACK.

The Grease-Proof Covered Pots have perfectly fitting lids, are practically unbreakable, and the only article really answering the purpose intended.

The following Analytical Report should be noted by the trade:—

London, January 5, 1891.

"We have examined the two covered pots marked November 21, 1890, one containing strong nitrate of mercury ointment, and the other iodine ointment, the object being to discover—(1) Whether the ingredients of which the pots are composed have in any way affected the ointments; (2) Whether the pots have been deteriorated by the action of the ointments.



We hereby certify that no trace of any of the ingredients of the pot can be discovered in either of the ointments, and further that the pots themselves were found not to have been acted on at all; and we further consider 'Stipendum' admirably adapted for such pharmaceutical preparations.

Signed, C. T. KINGZETT, F.I.C., F.C.S.
(Ex Vice-President Society of Public Analysts)
R. H. HARLAND, F.I.C. F.C.S.
(Public Analyst).

To be had of all Druggists' Sundriesmen.

Wholesale only of the Company.

WILEY'S CHEMICAL ESSENCE

FOR

LAMENESS IN HORSES.

Agents Wanted in every Town. Handbills, with Name and Address, supplied gratis
50 YEARS' UNBROKEN SUCCESS.

SOLE MAKER & PROPRIETOR, J. ROOKLEDGE, CHEMIST, EASINGWOLD, YORK.
 TO BE HAD OF USUAL WHOLESALE HOUSES

WALKER, TROKE & CO.

WHOLESALE DRUGGISTS,
 82 CITY ROAD,
 LONDON, E.C.



SOLE MAKERS OF
GABRIEL & TROKES
GELATINE CAPSULED
HORSEBALLS

Alterative, Condition, Cordia,
 Cough, Diuretic, Fever,
 Physic, and Worm Balls.

QUOTATIONS & SAMPLES FREE ON APPLICATION.

SILVER MEDAL
 I.H.E. 1884.



THE ONLY
 MEDAL AWARDED
 FOR THIS
 SPECIALITY

CHLORIDE OF LIME!
 IN AIRTIGHT WATERPROOF & ODOURLESS PACKAGES
 INVENTORS AND MANUFACTURERS **NATIONAL CHEMICAL CO., LONDON**

THE N. C. Co's. PACKAGES HAVE STOOD THE TEST FOR MANY YEARS, AND CAN
 ALWAYS BE RELIED UPON TO GIVE SATISFACTION.

KEPT IN STOCK BY ALL WHOLESALE DRUGGISTS &c.
 SEE THEIR PRICE LISTS

SILVER MEDAL
 I.H.E. 1884.



BEWARE
 OF OTHER SO-
 CALLED AIRTIGHT
 PACKAGES.



LONDON, 1884

CARBOLIC DISINFECTANTS



LONDON, 1884.

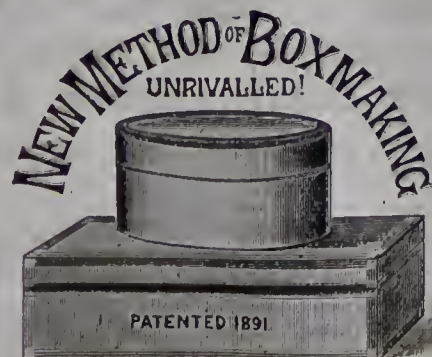
BEFORE ORDERING ELSEWHERE write for detailed Price Lists and Samples of

POWDERS, ACIDS, FLUIDS, SOAPS, &c.

TO

ADAMS, WEBSTER & CO.

Wholesale & Export Disinfectant Manufacturers, **HACKNEY, LONDON, N.E.**



THE MACHINES CAN NOW BE SEEN AT WORK AS UNDER
TREMUS TABERNACLE AND
 CASTLE STREETS LONDON
 FULL PARTICULARS ON APPLICATION. E.C.

G. B. KENT & SONS

Have been awarded the ONLY



A.D. 1777.

GOLD MEDAL



At the Paris Exhibition, 1889, for

ENGLISH BRUSHES

See pages 169-172 WINTER ISSUE, January 31st, 1891.

S.V.R., B.P.

We wish to draw the attention of Chemists to the excellence of the spirit we supply for pharmaceutical purposes. We have devoted great care and attention to this branch and have made it a leading line.

That our efforts in this direction have been appreciated is proved by the number of unsolicited testimonials we have received from nearly every town in the country, of which the following is a specimen:—

GENTLEMEN,—

Please send 5 gall. 56 o.p. as before. I have pleasure in saying I have always found your spirit answer all tests, which is more than I can say of all I have had from different places, and also to be practically free from odour.

Messrs. Stephen Smith & Co.

The Pharmacy, Morecambe.

Yours faithfully, JOSH. N. CUTTS, B.Sc., F.C.S.

In consequence of the increase in the spirit duty our prices will be—

S.V.R. 56 o.p. ... 19s. 7d.

CASH WITH ORDER.

Double Distilled, 56 o.p. ... 19s. 11d

REDUCTIONS FOR QUANTITIES.

SPECIALITY FOR PERFUMERY.

This pure grain spirit, which has been thrice rectified and filtered through charcoal, is being largely used in making high-class Perfumes.

Price, 20/2, 56 o.p.; 20/8, 60 o.p. Cash with Order. Reductions for Quantities.

STEPHEN SMITH & CO., BOW, LONDON, E.**S. V. METH.****JONES & COMPANY,****COPPERFIELD ROAD****LONDON, E.****LARGEST MAKERS IN THE KINGDOM.**

We are prepared to supply METHYLATED SPIRIT in 5-gallon quantities at Lowest Prices.

REDUCTIONS TO LARGE BUYERS.
SAMPLES FREE.

JAMES BURROUGH, S.V.R.**GALE ST., CHELSEA, S.W.****and Methylated Spirit****AT LOWEST PRICES.****WRITE FOR QUOTATIONS****METHYLATED SPIRIT & FINISH**

Supplied of the best quality in wholesale quantities by

J. & W. HARVEY & CO., Distillers, Yoker, GLASGOW.**LONDON AGENTS—JAMES CHAMBERS & CO., 23 BIRCHIN LANE, CORNHILL, E.C.****BOORD & SON,**

DISTILLERS, FOREIGN WINE AND SPIRIT MERCHANTS, AND METHYLATORS,
ALLHALLOWS' LANE, & BARTHOLOMEW CLOSE, LONDON, E.C.

Quotations for **S.V.R.** Methylated Spirit and Finish on application.
FINEST ORANGE WINE FOR QUININE.

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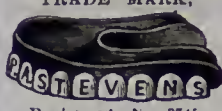


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NORTH—October 26, 1886.

KEATING v. POLL.

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IT WAS FURTHER ORDERED—

That the Defendant, William Sheppard Poll, do pay to the Plaintiffs their costs of this action.

“Keating's Powder” is a special preparation, different from, and not to be compared with, any so-called Insect Powders which give so much dissatisfaction to Customers.

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